EMC METALS CORP.
Form 10-K
March 28, 2013

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2012

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

000-54416
(Commission File Number)

EMC METALS CORP.
(Exact Name of Registrant as specified in its charter)

British Columbia, Canada	**98-1009717**
(State or other Jurisdiction of Incorporation or organization)	(I.R.S. Employer Identification No.)

1430 Greg Street, Suite 501	
Sparks, Nevada	**89431**
(Address of Principal Executive Offices)	(Zip Code)

Registrant s Telephone Number, including area code: **(775) 355-9500**

Securities registered pursuant to Section 12(b) of the Act: **None**

Securities to be registered pursuant to Section 12(g) of the Act:

Common Shares without par value
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the

Act. Yes [ ] No [X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act (Check one):

Large Accelerated Filer [ ]	Accelerated Filer [ ]
Non-Accelerated Filer [ ]	Smaller Reporting Company[x]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [X]

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was sold, or the average bid and asked price of such common equity, as of the last business day of the registrant s most recently completed second fiscal quarter: $6,462,455 as at June 30, 2012.

Indicate the number of shares outstanding of each of the registrant s classes of common equity, as of the latest practicable date: 165,358,337 common shares as at March 25, 2013.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K, which Proxy Statement is to be filed within 120 days after the end of the registrant's fiscal year ended December 31, 2012.

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PART I

Note about Forward-Looking Statements

Certain statements contained in this registration statement constitute "forward-looking statements". Forward-looking statements may include, but are not limited to, statements with respect to the future price of commodities, the estimation of mineral resources, the realization of mineral resource estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, our ability to fund property acquisition costs, our ability to reach targeted time frames for establishing feasibility, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, the completion of financings and regulatory approvals. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "scheduled", "estimates", "intends", "anticipates" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would" or "will be taken", "occur" or "be achieved". Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward looking statements. Such factors may include, among others, risks related to our joint venture operations; actual results of current exploration activities or production technologies that we are currently testing; actual results of reclamation activities; future metal prices; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental or regulatory approvals or financing or in the completion of development activities, as well as those factors discussed in the section entitled "Risk Factors" and elsewhere in this registration statement. Although we have attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company , EMC , we , u our and words of similar meaning refer to EMC Metals Corp.

Glossary of Terms

Alteration	Usually referring to chemical reactions in a rock mass resulting from the passage of hydrothermal fluids.
Assay	An analysis to determine the presence, absence or quantity of one or more components, elements or minerals.
Base metal	Any non-precious metal (e.g. copper, lead, zinc, nickel, etc.).
Chalcopyrite	A yellow crystalline mineral consisting of a sulphide of copper and iron. It is the principal ore of copper.
Concession	A grant of a tract of land made by a government or other controlling authority in return for stipulated services or a promise that the land will be used for a specific purpose.
Core	The long cylindrical piece of a rock, up to several inches in diameter, brought to the surface by Diamond drilling.

Diamond drilling	A drilling method in which the cutting is done by abrasion using diamonds embedded in a matrix rather than by percussion. The drill cuts a core of rock, which is recovered in long cylindrical sections.
Dip	The angle at which a vein, structure or rock bed is inclined from the horizontal as measured at right angles to the Strike; may also apply to the angle of inclination for a drill hole.
Epithermal	A hydrothermal mineral deposit formed within about one kilometer of the earth s surface and in the temperature range of 50 200 degrees Celsius. Also used to denote the environment of deposition.
Fractures	Breaks in a rock, usually due to intensive folding or faulting.
Grade	The concentration of a valuable mineral within an Ore.
Hydrothermal	Hot fluids, usually water, which may, or may not carry metals and other compounds in solution to the site of mineral deposition or wall rock alteration.
Igneous	A rock formed by the cooling of molten silicate material.
Intrusion	A general term for a body of Igneous rock formed below the surface of the earth.
Intrusive	A body of Igneous rock formed by the consolidation of magma intruded into other rocks, in contrast to lavas, which are extruded upon the surface.
Kg	Kilogram which is equivalent to approximately 2.20 pounds.
Km	Kilometer which is equivalent to approximately 0.62 miles.
Kt	Thousand tonnes.
Lode	A deposit of metallic ore filling a fissure in the surrounding rock.
Mineralization	A term used to describe the presence of minerals of possible economic value. Also used to describe the process by which concentration of economic minerals occurs.
Mlbs	Million pounds.
Net Smelter Returns Royalty	A share of the net revenues generated from the sale of metal produced by a mine.
NI 43-101	National Instrument 43-101 *Standards for Disclosure of Mineral Projects*, being the regulation adopted by Canadian securities regulators that governs the public disclosure of technical and scientific information concerning a mineral property.
Ore	A naturally occurring solid material from which a metal or valuable mineral can be profitably extracted.
Outcrop	An exposure of rock at the earth s surface.

Pegmatite Coarse-grained igneous rocks that often occur as wide veins cutting across other types of rock.

Porphyry Igneous rock of any composition that contains conspicuous crystals in a fine grained groundmass.

ppb and ppm Parts per billion and parts per million, respectively.

Pyrite Iron Sulphide mineral. The most common and abundant Sulphide mineral and often found in association with copper and gold.

Qualified Person Means a Qualified Person as defined in National Instrument 43-101, including an engineer or geoscientist in good standing with their professional association, with at least five years of relevant experience.

Quartz The second most common rock forming mineral in the earth s crust. SiO2.

Resource Means any of a measured, indicated or inferred resource as used in NI 43-101, and having the following meanings:

measured resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

indicated resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

inferred resource is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

For the purposes of the above a **mineral resource** means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted

from specific geological evidence and knowledge.

	(Please refer to **Item 3. Property - Cautionary Note To U.S. Investors Regarding Resource Estimates** in regards to the use of the above terms in this registration statement.)
Rhyolite	The fine grained equivalent of a granite.
Sulphide	A class of minerals characterized by the linkage of sulphur with a metal (such as Pyrite (FeS2)).
tpd	Tonnes per day.
Tonnes	A metric ton which is equivalent to approximately 2,204 pounds.
Tuff	A Volcanic rock formed through the compaction of volcanic crystals and/or rock fragments generally smaller than 4 mm in diameter.
Sedimentary	A rock formed from cemented or compacted Sediments.
Sediments	The debris resulting from the weathering and breakup of other rocks that have been deposited by or carried by runoff, streams and rivers, or left over from glacial erosion or sometimes from wind action.
Strike	The direction or bearing from true north of a vein, rock formation or structure measured on a horizontal surface.
Vein	A geological feature comprised of minerals (usually dominated by quartz) that are found filling openings in rocks created by faults or replacing rocks on either side of faults or Fractures.
Volcanic rock	A finely crystalline or glassy Igneous rock resulting from volcanic actions at or near the earth s surface.

ITEM 1. BUSINESS

General

We were incorporated on July 17, 2006 under the laws of British Columbia, Canada under the name Golden Predator Mines Inc. We were incorporated as a wholly owned subsidiary of Energy Metals Corp. for the purpose of holding precious metals and certain specialty metals assets. In order to focus on specialty metals, during February 2009 we transferred most of our precious mineral assets to our then wholly-owned subsidiary Golden Predator Corp. and on March 6, 2009 we completed a spin-out of Golden Predator Corp. to our shareholders. Effective March 12, 2009, we changed our name to EMC

Metals Corp.

We are a reporting issuer in the Canadian Provinces of British Columbia, Alberta and Ontario and our common shares are listed for trading on the Toronto Stock Exchange under the trading symbol EMC .

Our head office is located at 1430 Greg Street, Suite 501, Sparks, Nevada 89431. The address of our registered office is 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8.

Our primary asset is our Springer tungsten mill and mine which we acquired from General Electric Company and which has been on care and maintenance since acquisition. During 2012, we prepared mine restart planning documents and are currently seeking either a development partner for the financing and restart of the mine, or a buyer for the entire asset. Our other focus of operations is the exploration and development of our specialty metals assets, including the Nyngan scandium deposit located in New South Wales, Australia and the Tørdal scandium/rare earth minerals deposit in Norway.

Intercorporate Relationships

The chart below illustrates our corporate structure, including our subsidiaries, the jurisdictions of incorporation, and the percentage of voting securities held. During 2012, we incorporated wholly owned subsidiaries EMC Metals USA, Inc. (Nevada) and EMC Metals Australia Pty Ltd (Australia) for the purposes of conducting operations in those jurisdictions.

Recent History

Nyngan Project Acquisition - Exploration Joint Venture with Jervois Mining Limited

On February 5, 2010, we entered into an Exploration Joint Venture Agreement (JV Agreement) with Jervois Mining Limited (Jervois) to develop the Nyngan scandium property in New South Wales, Australia, which is commonly referred to as the Nyngan Project. The JV Agreement, as amended, gave us the right to earn a 50% interest in a joint venture with Jervois, for the purpose of holding and developing the Nyngan Project.

Pursuant to the terms of the JV Agreement, our right to proceed to form a joint venture with Jervois Mining was conditional on preliminary conditions which were satisfied by March 30, 2010. As a result of the satisfaction of these conditions, we had the right to earn a 50% interest in a joint venture. The JV Agreement provided that we earn our 50% by doing the following:

1. conducting a minimum of AUD$500,000 in exploration and metallurgical test-work on the Nyngan Project within 180 business days of the above conditions precedent being satisfied, or paying cash in lieu thereof. In September of 2010, the deadline was extended to June 15, 2011. The required exploration and metallurgical test-work was completed by us before the deadline and accordingly this condition was met;

2. delivering a feasibility study by February 28, 2012; and

3. paying to Jervois an additional AUD$1,300,000 plus taxes, within 5 business days of the delivery of the feasibility study.

On February 24, 2012, EMC delivered to Jervois the AUD$1.43 million cash payment and an independent NI 43-101 report entitled *"Technical Report on the Feasibility of the Nyngan Scandium Project"* dated February 23, 2012 (the "Report"), whichwas compiled by SNC-Lavalin. The Report was delivered to Jervois following an extensive discussion and presentation to the Jervois Board and management.

On February 27, 2012 EMC received written notice from Jervois rejecting the Report for the stated reasonthat theReport did not fall withinthedefinitionof "FeasibilityStudy"provided in the JVAgreement. EMC disputed this rejection. Jervois returned the AUD$1.43 million cash payment and a series of without prejudice discussions were held in an attempt to resolve the dispute. On Friday June 22, 2012, we received notice of a lawsuit filed against the Company in the Supreme Court of Victoria, Australia, by Jervois. The lawsuit contended that: 1) the JV Agreement (including our earn-in right) was automatically terminated because the Report failed to meet the standards set out in that agreement, 2) EMC s formal Dispute Notice had no force and effect as the JV Agreement was effectively terminated by Jervois prior to that date, and 3) EMC must remove legal claims placed on the Nyngan property by EMC that prevent Jervois from transferring property interests. On August 20, 2012, EMC filed its formal defense and a counterclaim with the Supreme Court in Victoria, Australia. In its counterclaim, EMC sought relief that includes: 1) a declaration that it satisfied the earn-in conditions, 2) a declaration that upon payment to Jervois of the sum of AUD1.3 million, EMC is entitled to a 50% interest in the Joint Venture, and 3) damages to compensate EMC for the loss that it has suffered as a result of Jervois wrongfully treating the Joint Venture as terminated.

On February 6, 2013, we announced agreement of an out of court settlement to the dispute with Jervois. The terms of the settlement transferred 100% ownership and control of the Nyngan Scandium project to the Company, in return for AUD$2.6 million cash payments and a percentage royalty payable to Jervois on sales of product from the project. Exploration tenements formally transfer on final cash payment, but EMC has the right to proceed with development and implementation of the project now. Jervois retains a production royalty on the Nyngan project of 1.7% of sales price for products produced from the site for a term of 12 years from first production date. A minimum annual royalty applies, based on 10 tpa scandium production.

The binding settlement entered into with Jervois brings to an end all court actions, claims and counterclaims, including claims for damages and legal and other costs. The settlement is subject to Australian FIRB approval of EMC s 100% ownership of the project.

Acquisition of The Technology Store, Inc.

We entered into a stock purchase agreement dated November 19, 2009, with Willem P. Duyvesteyn and Irene G. Duyvesteyn, pursuant to which we acquired all of the issued and outstanding common shares of The Technology Store, Inc. (TTS), a Nevada corporation. In exchange, we issued to the shareholders of TTS, 19,037,386 of our common shares, paid USD$802,358 in cash, issued a promissory note in the amount of USD$500,000 with an amended maturity date of June 30, 2012, and agreed to pay certain U.S. federal income taxes payable in connection with the transaction. The acquisition of TTS completed with an effective date of December 16, 2009.

TTS conducts research and development of commercial extractive metallurgical processes. TTS specializes in the development of specialty metals extractive technologies, with emphasis on improving recoveries in the extraction of scandium, tungsten, boron, lithium, titanium, and nickel and a host of other emerging and unusual metals. As a condition of the stock purchase agreement, Willem D. Duyvesteyn, the principal of TTS, was appointed to our board of directors on December 16, 2009.

Spin-out of Golden Predator Corp.

Pursuant to a reorganization agreement dated February 5, 2009 between us and our then wholly-owned subsidiary Golden Predator Corp., we transferred most of our precious metals assets to Golden Predator in order to focus on our specialty metals assets and pursue additional specialty assets opportunities.

Concurrently with the reorganization, we completed a spin-out of Golden Predator to our shareholders. The spin out was completed on March 6, 2009, at which time we changed our name to EMC Metals Corp. As a result of the spin-out, Golden Predator became a reporting issuer in Canada and subsequently listed on the TSX Venture Exchange and then the Toronto Stock Exchange.

In connection with the reorganization and spin-out, we granted Golden Predator certain participation and acquisition rights to gold projects that were held by our subsidiary Great American Minerals, Inc. We subsequently sold Great American Minerals to Golden Predator in November of 2010 in consideration for a reduction in inter-corporate amounts owing due to adjustments from the spin-out and other adjustments. We however retained our interest in the non-gold properties including the Carlin Vanadium property.

Pursuant to a Mine Facility Agreement dated October 25, 2010, we granted Golden Predator access and use rights to a parcel of property on a corner of the Springer Mill property, a refurbished and permitted mill located in Nevada. The access rights provide Golden Predator with a suitable site to develop an independent gold milling facility.

Business Operations

Company Summary

We are a mineral exploration and development company that is focused on the development of scandium, tungsten, vanadium, rare earth minerals, and other specialty metals, including nickel, cobalt, boron, manganese, tantalum, titanium and zirconium.

Our principal properties and projects include 100% ownership of the Springer mine and mill complex in Nevada, 100% of the Nyngan Project in Australia, 100% of the Tørdal and Hogtuva Projects in Norway and 100% ownership of the Carlin Vanadium project in Nevada.

Corporate Objective and Strategy

Our corporate focus is to produce and sell scandium and scandium-based products, and to restart and operate, or potentially sell the Springer tungsten mine and mill. None of our current properties has advanced to the development or production stage and we are currently an exploration stage company. In addition we do not currently have reserves on any of our properties. We are, however, conducting technical and assessment work on the Nyngan scandium property located in Australia, for the purpose of preparing a pre-feasibility study on the development of the scandium resource. Subject to a successful pre-feasibility study, we intend to develop the Nyngan resource for production, with a view to supplying the anticipated future demand for scandium oxide and scandium-content materials. For further information on the Nyngan Project, please refer to *Item 3. Properties - Description of Properties Nyngan Scandium Project and Item 1A. Risk Factors* . In addition, we have completed a NI 43-101 Preliminary Economic Assessment (PEA) of our Springer mine property, filed on SEDAR, demonstrating the economic feasibility of restarting the mine. For further information on the Springer property, pleases refer to *Item 3. Properties - Description of Properties Springer Mine Property and Item 1A. Risk Factors* .

Concurrently with our analysis of the Nyngan Project, we are developing and testing unique mineral recovery techniques as well as techniques to produce high quality finished scandium metals. If effective at a commercial level, these recovery and finishing techniques will provide increased economic margins and returns on capital on any future scandium production. Presently our recovery and finishing technology is in the testing phase, and there is no guarantee that we will be able to benefit from the commercial application of such techniques or that we will have scandium production in the future.

Global Scandium Production and Market

Scandium is the 31st most abundant element in the earth s crust (average 33 ppm), which makes it more common than lead, mercury and precious metals, but less common than copper. Scandium has characteristics that are similar to rare earth elements, and it is often classified as a member of that group, although it is technically a light transition metal. Scandium occurs in nature as an oxide, rarely occurs in concentrated quantities because it does not selectively combine with the common ore-forming anions, and it very difficult to reduce to a pure metal state. Scandium is typically produced and sold as scandium oxide (Sc_2O_3).

Global annual production estimates of scandium range from 10 tonnes to 15 tonnes, but accurate statistics are not available due to the lack of public information from countries in which scandium is currently being produced. There are three known production sources globally today: stockpiles from the former Zhovti Voty uranium mine in Ukraine, the rare earth mine at Bayan Obo in China, and mines on the Kola Peninsula in Russia.

There is no reliable pricing data on scandium oxide trading. The U.S. Geological Survey in its latest report (January 2011) documents the price of scandium oxide at USD$1,400/kg for the four previous years, however small quantities of scandium oxide are currently offered on the internet by traders for multiples of this figure. Scandium oxide prices vary based on purity and quantity. Small sale quantities tend to command premium prices, and large quantities (over one tonne) are simply not available to price.

Principal uses for scandium are in high-strength aluminum alloys, high-intensity metal halide lamps, electronics, and laser research. Recently developed applications include welding wire and fuel cells which are expected to be in future demand. Approximately 15 different commercial scandium-aluminum alloys have been developed in Russia, and some of them are used for aerospace applications. In Europe and the U.S., scandium containing alloys have been evaluated for use in structural parts in airplanes. The combination of high strength and lightweight makes scandium-aluminum alloys suitable for a number of applications.

Competitive Conditions

We compete with numerous other companies and individuals in the search for and the acquisition or control of attractive rare earth and specialty metals mineral properties. Our ability to acquire further properties will depend not only on our ability to operate and develop our properties but also on our ability to select and acquire suitable properties or prospects for development or mineral exploration.

In regards to our plan to produce scandium, there are a limited number of scandium producers presently. If we are successful at becoming a producer of scandium, our ability to be competitive will require that we establish a reliable supply of scandium to the market, delivered at purity levels demanded by various applications, and that our operating costs generate margins at prices that will be set by customers and competitors in a market yet to mature.

Governmental Regulations and Environmental Laws

The development of any of our properties, including the Nyngan Project and the Springer mine and mill, will require numerous local and national government approvals and environmental permits. For further information about governmental approvals and permitting requirements, please refer to *Item 1A. Risk Factors* .

For detailed information about permitting on the Springer property, please refer to the technical report, titled *Preliminary Economic Assessment on the Springer Tungsten Mine, Pershing County, Nevada, USA* available for public review at www.sedar.com.

For detailed information about permitting on the Nyngan property, please see the report, titled, *NI 43-101 Technical Report on the Nyngan Gilgai Scandium Project, Jervois Mining Limited, Nyngan, New South Wales, Australia* available for public review at www.sedar.com.

Employees

As at January 1, 2013, we have 9 full and part time employees and 1 individual working on a consulting basis. Our operations are managed by our officers with input from our directors. We engage geological, metallurgical, and engineering consultants from time to time as required to assist in evaluating our property interests and recommending and conducting work programs.

ITEM 1A. RISK FACTORS

In addition to the factors discussed elsewhere in this registration statement, the following are certain material risks and uncertainties that are specific to our industry and properties that could materially adversely affect our business, financial condition and results of operations.

Risks Associated with the Springer Project

We may not be able to utilize the Springer Property. The Springer property, which includes an existing mine and refurbished mill facility, constitutes our largest asset. In September of 2008, we suspended work on the Springer property and placed the facility on care and maintenance pending improvement in the global financial markets and strengthening tungsten prices. While tungsten prices have improved, and we are seeking to resume operations, significant additional capital and additional management resources will be required. Our inability to obtain such management and capital will result in the Springer property continuing to be on care and maintenance.

The price of tungsten is subject to significant volatility. If we elect to operate the Springer mine and mill, there is no certainty that economic conditions or tungsten prices will not again deteriorate, and that production at the Springer Mine will need to be suspended again. To the extent tungsten prices may deteriorate after we commence operations, such operations may not be profitable resulting in the closure of the mine and mill, and resulting loss in value of our company to investors.

We may incur a loss if we sell the Springer property. The Springer property has a significant book value on our financial statements. We are currently considering selling the Springer property as a strategic alternative to operation. There is no assurance that a suitable buyer can be found for the property, or that the terms of such a sale will not result in a financial loss to us. To the extent we cannot find a suitable buyer or other strategic party, we may have to sell the property at a significant loss, resulting in a reduced asset value of the company as a whole, and a reduction in available funds for other corporate purposes. These factors may result in a reduction in the market price of our shares.

Risks Associated with the Nyngan Project

If we are not able to complete acquisition of the Nyngan Project our share price may decline. We are subject to payment requirements pursuant to our settlement agreement with Jervois. There is no assurance that we will meet our payment obligations, and if we are unable to meet the obligations then the project will revert to Jervois. The loss of this project would likely significantly reduce the market price of our shares.

There are technical challenges to scandium production that may render the project not economic. There is no assurance that we will demonstrate economic viability on the Nyngan resource. The economics of scandium recovery are known to be challenging. There are very few facilities producing scandium and the existing scandium producers are secretive in their techniques for recovery. In addition, the recovery of scandium product from laterite resources, such as at the Nyngan deposit, has not been demonstrated at an operating facility. The Nyngan processing facility design, if constructed, will be the first of its kind for scandium production. These factors increase the possibility that we will encounter unknown or unanticipated production and processing risks. Should any of these risks become actual, they could increase the cost of production thereby reducing margins on the project or rendering the project uneconomic.

There is no guarantee that we will be able to finance the Nyngan Project for production. Any decision to proceed with production on the Nyngan Project will require significant production financing. Scandium projects are very rare and economic and production uncertainty may limit our ability to attract the required amount of capital to put the project into production. If we are unable to source production financing on commercially viable terms, we may not be able to proceed with the project and may have to write-off our investment in the project.

If we are successful at achieving production, we may have difficulty selling Scandium. Scandium is characterized by unreliable supply, resulting in limited development of markets for scandium oxide. Markets may take longer to develop than anticipated, and Nyngan and other potential scandium producers may have to wait for products and applications to create adequate demand. Certain applications may require lengthy certification processes that could delay usage or acceptance. In addition certain scandium applications require very high purity scandium product, which is much more difficult to produce than lower Grade product. If we commence production, our inability to supply scandium in sufficient quantities, in a reliable and timely manner, and in the correct quality, could reduce the demand for any scandium produced from our projects and possibly render the project uneconomic.

Risks Associated with the Carlin Vanadium Property

There are technical challenges to production of Vanadium from the property that may reduce the value of the property. The Carlin property hosts vanadium contained in a black shale. This vanadium host is known to present challenging processing issues in the separation of vanadium. Techniques to separate vanadium in this environment are complex. As a result, shareholders may never see the property developed due to technical risks, and similarly the value of the property may be greatly reduced if such technical risks present an obstacle to further exploration or development of the property.

Industry requirements may limit market opportunities for vanadium production. New battery technologies are emerging that rely on vanadium, these markets may take longer than expected to develop and increase vanadium demand. These battery technologies require high purity vanadium product, which is difficult and costly to produce. The purity of any vanadium that may in the future be extracted from the Carlin property is unknown and uncertain. The inability to produce vanadium with sufficient purity for market purposes will likely reduce the economic prospects of any proposed development of the property.

General Risks Associated with our Mining Activities and Company

We may not receive permits necessary to proceed with the development of a mining project. The development of any of our properties, including the Nyngan Project, will require numerous local and national government approvals, include environmental permits. Our ability to secure all necessary permits required to develop any of our projects is unknown until we make application for such permits. If we cannot obtain all necessary permits, the project cannot be developed, and our investment in the project will likely be lost. Our future market value will likely be significantly reduced to the extent one or more of our projects cannot proceed to the development or production stage due to an inability to secure all required permits.

Mineral Resource Estimates on our properties are subject to uncertainty and may not reflect what may be economically extracted. Resource estimates included for scandium, tungsten and other minerals on our Nyngan, Springer and Carlin properties are estimates only and no assurances can be given that the estimated levels of tungsten and other minerals will actually be produced or that we will receive the tungsten and other metal prices assumed in determining our resources. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling and exploration results and industry practices. Estimates made at any given time may significantly change when new information becomes available or when parameters that were used for such estimates change. By their nature resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Furthermore, market price fluctuations in scandium, tungsten and other metals, as well as increased capital or production costs or reduced recovery rates, may limit our ability to establish reserves on any of our properties. The extent to which resources may ultimately be reclassified as proven or probable reserves is dependent upon the demonstration of their profitable recovery. The evaluation of reserves or resources is always influenced by economic and technological factors, which may change over time. Accordingly, current resource estimates on our material properties may never be converted into reserves, or be economically extracted, and we may have to write-off such properties or incur a loss on sale of our interest on such properties, which will likely reduce the value of our shares.

Our potential for a competitive advantage in specialty and rare metals production depends on the availability of our technical processing abilites, as currently provided by our Chief Technology Officer. We are dependent upon the personal efforts and commitment of Willem Duyvesteyn, our CTO, a director and significant shareholder of our company, for the continued development of new extractive technologies related to scandium and other rare and specialty metals production. The loss of the services of Mr. Duyvesteyn will likely limit our ability to use or continue the development of such technologies, which would remove the potential competitive and economic benefit of such technologies.

Our operations are subject to losses due to exchange rate fluctuation. We maintain accounts in Canadian and U.S. currency. Our equity financings have to date been priced in Canadian dollars, however all of our material projects and non-cash assets are located outside of Canada and require regular currency conversions to local currencies where such projects and assets are located. Our operations are accordingly subject to foreign currency fluctuations and such fluctuations may materially affect our financial position and results. We do not engage in currency hedging activities.

We do not currently earn any revenue and without additional funding, we will not be able to carry out our business plan, and if we raise additional funding existing security holders may experience dilution. As an exploration stage mining company, none of our principal properties are in operation and we do not currently earn any revenue. In order to continue our exploration activities and to meet our obligations on the Nyngan Scandium Project, we will need to raise additional funds. Recently, we have relied entirely on the sale of our securities to raise funds for operations. Our ability to continue to raise funds from the sale of our securities is subject to significant uncertainty due to volatility in the mineral exploration marketplace. We may also seek to raise funds from the sale of a partnership interest or all of our Springer Property assets, however our ability to sell these assets and the price at which we may sell these assets is subject to similar market volatility, as well as the number and nature of potential buyers. If we are unable to raise funds from the sale of our securities or our Springer assets, then we likely will not be able to carry out our business plan of achieving Scandium production, or continue exploration activities on our current or future exploration properties. If we are able to raise funds from the sale of our securities, existing security holders may experience significant dilution of their ownership interests and possibly to the value of their existing securities.

ITEM 2. PROPERTIES

Cautionary Note to U.S. Investors Regarding Resource Estimates

Certain terms used in this section are those used in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of U.S. securities laws. Canadian requirements, including NI 43-101, differ significantly from the requirements of the SEC, and resource information contained herein may not be comparable to similar information disclosed by U.S. companies.

In particular, and without limiting the generality of the foregoing, the term resource does not equate to the term reserves . The requirements of NI 43-101 for identification of reserves are not the same as those of the SEC, and reserves reported in compliance with NI 43-101 may not qualify as reserves under SEC standards. Under U.S. standards, mineralization may not be classified as a reserve unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made.

The SEC s disclosure standards normally do not recognize information concerning measured mineral resources , indicated mineral resources or inferred mineral resources or other descriptions of the amount of mineralization in mineral deposits that do not constitute reserves by U.S. standards, in documents filed with the SEC. In addition, resources that are classified as inferred mineral resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimated inferred mineral resources may not generally form the basis of feasibility or pre-feasibility studies. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable.

Disclosure of contained ounces in a resource is permitted disclosure under Canadian regulations, however, the SEC normally only permits issuers to report mineralization that does not constitute reserves by SEC standards as in-place tonnage and grade without reference to unit measures.

Accordingly, information concerning mineral deposits set forth herein may not be comparable with information presented by companies using only U.S. standards in their public disclosure.

Description of Mineral Projects

SPRINGER MINE PROPERTY

Our principal asset is the Springer mine property, a former tungsten producing operation located in Imlay, Nevada, wholly owned by us through a subsidiary, Springer Mining Company, a Nevada corporation. Springer is classified as a United States Property for purposes of financial statement segment information.

The Springer Mine Property represents a completed mine, mill, and production complex which was operated briefly by Utah International Inc. for the General Electric Company from 1980 to 1981. The Springer Mine was closed in 1982 due to low tungsten prices. The facilities have been held on care and maintenance since that time, however significant investments by us have been made to the facilities in recent years and operations at the mine and mill facility could be restarted relatively quickly.

Significant investment in the mill and facilities was made by EMC between 2006 and 2008. This refurbish and upgrade work was nearly complete to make the primary milling and flotation circuits in the Springer mill fully operational. Work remaining to make the tungsten processing facility fully operational includes the addition of a gravity circuit, addition and installation of a molybdenum flotation/recovery circuit, certain modifications to the existing flotation circuits, and completion of the installation of new automatic controls throughout the mill. Metallurgical testing by EMC Metals has shown that the process design is capable of producing a saleable scheelite concentrate product containing in excess of 65% tungsten oxide (WO_3). The test work utilizes a combination of gravity separation and flotation. Additional work and investment has been conducted to expand the mill capacity from the original design of 1,000tpd to 1,200tpd.

In consideration of rising market prices for tungsten, during 2012 we made a decision to consider a restart of Springer operations. We conducted a re-assessment of the mineral resource and commissioned a restart plan for mining activities at Springer. The results of that reassessment were published publically on SEDAR, dated September 20, 2012, as a preliminary economic assessment (PEA). We are currently evaluating alternatives for the financing and management of restart rehabilitation and operational restart activities, and have conducted further independent studies for management that have not been published.

Property Description and Location

The Springer Mine Property is located approximately 25 miles southwest of the city of Winnemucca, in Pershing County, Nevada, and approximately 125 miles northeast of Reno, Nevada (see Figure 1). The mine has all season access by a gravel road in fair condition. The mine site is located at geographic coordinate s 40°46 56 N. latitude and 118°07 58 W longitude, (UTM coordinates are 4,515,212N and 404,438W, Zone 11, WGS84).

Figure 1: Location of Springer Property, Copper King Property, and Carlin Vanadium Property

Ownership

The Springer Facility is 100% owned by our wholly owned subsidiary, Springer Mining Company. It is comprised of 340 Lode mineral claims totalling approximately 7,024 acres, 25 placer claims totalling approximately 500 acres and fee lands totalling approximately 3,756 acres. The total area of the Springer Facility is approximately 11,280 acres, including all mineral claims and fee lands.

Geology and Mineralization

The Springer Facility is located on the eastern flank of the Eugene Mountains, a block-faulted horst of the Basin and Range tectonic province. The area is underlain by Mesozoic, metasedimentary rocks intruded by Cretaceous granitic rocks, which were later overlain by Tertiary Volcanic rocks. The meta-sedimentary rocks are composed of pelitic Sediments with thin beds of micritic limestone. These limestone beds host scheelite-bearing, contact metasomatic skarn deposits. These are arranged in two general horizons each with several individual beds. The horizons Strike north-northeast and Dip steeply to the northwest and to the southeast. Scheelite is the only tungsten mineral identified in the skarns. It occurs in early veins and as finely disseminated grains along localized marble fronts. It is also associated with later alteration of garnet and pyroxene, where it occurs as coarse-grained aggregates and fine to medium-grained, euhedral dipyramidal crystals.

Historical Work

There were three main phases of exploration work conducted on the Springer Facility by three different owner/operators. These exploration periods include:

I. Exploration drilling and underground sampling by Nevada-Massachusetts Corporation (NMC) between 1925 and 1958;

II. Exploration drilling and underground channel sampling completed by General Electric (GE) and Utah International Inc. (UII between during 1973 and 1982); and

III. Diamond drilling and reverse circulation drilling completed by EMC Metals in 2007 and 2008.

The NMC exploration work focused mainly within the mineralized beds located at the Stank and Springer-Humboldt Mines. No specific NMC sample or Assay data of from any of the drifting, mining or drilling is available for any of these areas.

The exploration drilling and sampling completed by GE and UII focused primarily on the Sutton I and Sutton II areas of the property. The vast majority of the modern exploration data was collected during this phase of work. GE and UII compiled most of the older NMC data, rehabilitated the historic underground workings, drilled 119 diamond Core holes from surface and underground, extended the underground workings and analyzed approximately 3,200 samples.

We completed the most recent exploration work in 2007 and 2008. During this time, seven diamond Core and 251 reverse circulation (RC) drill holes were completed in three main areas. We drilled 81 holes in the George beds, 79 holes in the Mill Beds and 51 holes in the Sutton I Beds. All of this drilling focused on near surface Mineralization in order to evaluate the open pit potential. A few diamond Core holes were located in the Sutton II areas for confirmation and expansion of the historical resources.

Prior to the decline of tungsten prices in 2008, the Springer mill had been the focus of an aggressive rehabilitation and expansion program by us over two years. Work is nearly complete to make the primary milling and flotation circuits fully operational. The necessary equipment and supplies to complete these circuits are on site. Work remaining to make the tungsten processing facility fully operational includes the addition of a gravity circuit, addition and installation of a molybdenum flotation/recovery circuit, certain modifications to the existing flotation circuits, and completion of the installation of new automatic controls throughout the mill.

Metallurgical testing by EMC Metals has shown that the process design is capable of producing a saleable scheelite concentrate product containing in excess of 65% tungsten oxide (WO_3). The test work utilizes a combination of gravity separation and flotation.

Additional work has been conducted to expand the mill capacity from the original design of 1,000 tpd up to 1,200 tpd. This work is approximately 85% complete.

Mineral Resources and Preliminary Economic Assessment

On September 20, 2012 we announced the results of a Preliminary Economic Assessment (PEA), including an updated resource estimate. The PEA was prepared for EMC by Associated Geosciences LTD. of Calgary, Alberta, Canada, and Practical Mining LLC. of Elko, Nevada, USA, both independent mining industry consultants. The PEA provides the first NI 43-101 compliant economic analysis on Springer, and was commissioned as part of EMC s planned restart of the Springer mining and milling operations.

Highlights from the PEA/Resource Update:

- Project restart is economic, feasible, and supported by current tungsten prices, based on a five year NI 43-101 production resource;
- Five year mine life net present value (NPV) of $22.8 million (8% discount, constant dollar, after tax);
- Internal rate of return (IRR) of 47% on restart capital of $30 million;
- Indicated resource of 355,000 tons (29.6% increase over previous resource estimate);
- Inferred resource of 1,933,620 tons (76.3% increase over previous resource estimate);
- New resource added on western side of the property, no previous resource estimate; and
- Average annual tungsten (WO_3) production of 134,960 MTU (total 674,790 MTU).

The PEA updates the resource estimate published in a prior NI 43-101 Technical Report titled, *NI 43-101 Technical Report on Resources, EMC Metals Corp., Springer Facility- Sutton Beds, Nevada, USA* prepared by SRK Consulting of Lakewood, Colorado, filed on SEDAR in May, 2009. The PEA both increases the resource tonnage and also adds an economic estimate to the project in restart. The resource update also adds tonnage on the western side of the property, where no resource had previously been established, despite having been the site of historic tungsten production. The western resource has promising potential for Springer, because the historic production records and current NI 43-101 drilling confirm superior tungsten grades, albeit at narrower vein widths.

The financial analysis of the mine restart, based on the current NI 43-101 resource, defines a 5 year mine life. The overall financial results, as presented in the PEA, are as follows:

Key Performance Measures Summary	Financial Result (US$)
Capital Cost (millions)*	$29.8
Average Annual Revenue (millions)	$43.2
Average Annual Operating Cost (millions)	$25.0
Average Operating Cost ($/MTU)	$186
Average Annual EBITDA (millions)	$17.8
Constant Dollar NPV (8%)	$22.8
Constant Dollar NPV (10%)	$20.1
Internal Rate of Return (IRR)	47%

WO_3 Concentrate Price Assumption/MTU (based on 80% of $400/MTU 24 month APT price)	$320
*NOTE: Includes working capital and contingency	

NOTE: A metric tonne unit (MTU) is the standard unit of measure for tungsten in trading markets. One MTU equals 22.04 pounds of contained WO_3, or 100th of a tonne of WO_3.

The mine plan in the PEA calls for the conversion of the existing Sutton Mine from a cut and fill operation, as designed by the prior operator, the General Electric Company (GE), to a modern longhole mining operation, more properly termed end-slicing. Sutton will be re-developed with ramps connecting drifts at various levels, modern rubber-tired equipment, and production and mine access utilizing both the existing shaft/hoist house and a new mine adit approaching mineralized beds from lower elevation ground to the south.

The mine plan also calls for a second independent mining operation at O Byrne, on the western side of the granite intrusion, utilizing the same mining techniques and equipment, with twin adit access. The hilly topography in the western beds lends itself to declined adit techniques that achieve sufficient depth to make for economic development.

The updated NI 43-101 resource provides for 4.8 years of mining from Sutton, and only 1.5 years from O Byrne, but at substantially higher grades.

This updated resource, included in the PEA, is as follows:

Springer Mine- Mineral Resource Statement of Resources

Resource Category	Cut-Off Grade WO_3	Resource Tons	Grade WO_3	Contained Tungsten Units STU's	Contained Tungsten Units MTU's
Indicated Total (Sutton only)	0.20%	355,000	0.537%	190,635	172,990
Inferred (by location)					
Sutton Resource	0.20%	1,616,000	0.459%	741,744	673,089
George Resource	0.20%	143,950	0.423%	60,863	55,230
O'Byrne Resource	0.20%	173,670	0.862%	149,719	135,861
Inferred Total	0.20%	1,933,620	0.493%	952,326	864,180

Note: a short ton unit (STU) = 20 lbs. WO_3: a metric tonne unit (MTU) = 22.04 lbs. WO_3
The effective date of each estimate of mineral resources above is August 20, 2012.

Permitting and environmental matters are largely in place, although the Company is currently seeking a right of way from the US Bureau of Land Management for rights to re-install a tailings pipeline to an existing tailings pond, planned to be put into service to secure mill tailings not backfilled into the mine.

Project economics assume a two year trailing average constant dollar $400/MTU APT price, and derive a concentrate price from that benchmark tungsten price, which is publically quoted. All dollar amounts for costs are also considered to be constant dollar no escalation for inflation has been considered, and thus the 8% discount rate applied to cash flows to generate Net Present Values (NPV s) should also be considered a constant dollar rate.

Economics do not assume any economic recovery of molybdenum disulphide (MoS_2). There is no molybdenum resource established for the property which corresponds to the mineable tungsten resource, therefore no co-product credit in the PEA. There is capital included in the $30 million total restart estimate to separate (float) molybdenum, because it has historically been present in the resource and must be removed from concentrates to meet customer product specifications.

First concentrate production is expected during the first half of 2014.

The NI 43-101compliant Technical Report, titled *Preliminary Economic Assessment on the Springer Tungsten Mine, Pershing County, Nevada, USA*, (the PEA), was filed on SEDAR October 2, 2012 and is available for public review at www.sedar.com.

The earlier NI 43-101 compliant resource technical report on the Springer property, independently prepared by Dr. Bart Stryhas of SRK Consulting Engineers and Scientists of Lakewood, Colorado, titled, *NI 43-101 Technical Report on Resources Springer Facility- Sutton Beds, Nevada, USA* is dated May 15, 2009, was filed on SEDAR on May 26, 2009 and is also available for public review at www.sedar.com.

NYNGAN SCANDIUM PROJECT

Property Description and Location

The Nyngan scandium resource is located approximately 500 kilometres northwest of Sydney, Australia. The property consists of two exploration licenses, controlled by Jervois, which encompass over 9,000 hectares. Nyngan is classified as an Australia Property for purposes of financial statement segment information.

The scandium resource is hosted within the lateritic zone of the Gilgai Intrusion, one of several Alaskan-type mafic and ultramafic bodies which intrude Cambrian-Ordovician metasediments collectively called the Girilambone Group. The laterite zone, locally up to 40 metres thick, is layered with hematitic clay at the surface followed by limonitic clay, saprolitic clay, weathered bedrock and finally fresh bedrock. The scandium mineralization is concentrated within the hematitic, limonitic, and saprolitic zones with values up to 350 ppm scandium.

The location of the property is provided in Figure 2 below. The location of the exploration licenses that we may earn an interest in are provided in Figure 3 below.

Mineral Resource

In March of 2010 a NI 43-101 technical report which outlined a resources estimate on the Nyngan Scandium Project was completed. The report, titled, *NI 43-101 Technical Report on the Nyngan Gilgai Scandium Project, Jervois Mining Limited, Nyngan, New South Wales, Australia* , was prepared by or under the supervision of Max Rangott (BSc). The resource estimate is summarized in Table 2 below.

Table 2

Nyngan Gilgai Scandium Project Resource Estimation				
Resource Category	**Cut off Sc (ppm)**	**Total Tonnes (kt)**	**Grade Sc (ppm)**	**Overburden Ratio**
Measured	100	2,718	274	0.81:1
Indicated	100	9,294	258	1.40:1
Total	100	12,012	261	1.10:1

Current Program - Overview

In February of 2010, the Company entered into a joint venture agreement (the JV) with Jervois Mining Limited (Jervois) of Melbourne, Australia to develop the Nyngan scandium property. The terms of the JV require EMC to earn in to a 50% position through a two stage work program.

- the first stage required EMC to spend a minimum of A$500,000 on project exploration and metallurgical test work by mid December 2010, and
- the second stage required the delivery of a feasibility study in the first quarter of 2012.

The stage I work timeframe were extended into 2011 and those first stage requirements were met during the second quarter of 2011. Second stage feasibility study work, was initiated in June 2011. To this end, we engaged SNC-Lavalin Inc. (Brisbane, Australia) to prepare a National Instrument NI 43-101 compliant technical report on the economics of the project. To support process design, costing, and production level assumptions, the results of metallurgical test work done by Hazen Research Inc. together with previous test-work by the CSIRO and METCON Laboratories, were used directly by SNC-Lavalin Inc. in compiling their report.

On February 24, 2012, EMC delivered to Jervois an independent NI 43-101 report entitled *"Technical Report on the Feasibility of the Nyngan Scandium Project dated* February 23, 2012, which was prepared by SNC-Lavalin.

No further technical work was accomplished during 2012 due to legal dispute proceedings with Jervois. Subsequent to our settlement of legal dispute with Jervois in February 2012, we are assessing near and mid-term technical work programs and project schedule. For further information on the legal dispute with Jervois, please refer to *Item 1.Business - Recent History - Nyngan Project Acquisition - Exploration Joint Venture with Jervois Mining Limited* .

Metallurgy Development

The first work phase of the metallurgy development program consisted of detailed metallurgical bench scale testing, and was intended to refine and enhance the Company s existing material process flow sheet to extract scandium from the resource material. This existing flow sheet, developed by Jervois and external consultants, formed the basis of a preliminary, conceptual engineering report for the processing elements of the project that was completed by Roberts & Schaefer of Salt Lake City, Utah.

The Roberts & Schaefer report included capital and operating cost estimates, based on process flow sheets and technical reports done for Jervois or EMC on various metallurgical aspects of the resource. These technical/process reports were done by METCON Laboratories of Sydney, Australia, the Commonwealth Scientific and Industrial Organization (CSIRO), Australia s national science agency, or by other research work, proprietary to or sourced by Jervois or EMC. The bulk of the process applied by Roberts & Schaefer in their Report was defined by bench scale as well as small scale pilot plant work results compiled by others, and a preliminary flow sheet complied by the CSIRO.

Highlights of the report are as follows:

- Capital costs for the laterite processing facility are estimated at US$56 million, including US$15 million for a sulphuric acid plant on site,
- Processing costs are estimated at less than US$300/kg $Sc_2 O_3$,
- The hydrometallurgical plant is designed to process approximately of 250 tpd of resource,

- Production of $Sc_2 O_3$ is estimated at 28,000 kilograms per year, and
- Process assumptions are proprietary, follow earlier work done by METCON Research and the CSIRO of Australia, and include standard and accepted processes for applying ore preparation, leaching, solvent extraction and product preparation methodologies.

Note that mineral resources that are not mineral reserves do not have demonstrated economic viability. The above estimates of capital and operating costs are a component of a number of factors required to complete a preliminary assessment of the economic viability of the project, and there is no guarantee that the company will achieve production from the resource at Nyngan.

In January 2011, EMC announced results of initial lab test work, independently prepared by Hazen Research, Inc., of Golden, Colorado, USA. These results defined general results involving conventional contained acid leach systems and suggested recoveries from resource of up to 75%. No secondary recoveries were considered in these initial bench-scale tests.

The second phase of the Hazen test work program continued through July, and involved continuous pilot plant testing of the acid leach systems, solvent extraction systems and product finish systems identified by earlier CSIRO work. The overall objectives of the test work program were to define and optimize a process or series of processes that achieves an 80% scandium recovery, lowest possible capital and operating costs, and most benign environmental impact, using standard and accepted processes.

On January 19, 2012 we announced receipt an independent metallurgical test-work report, titled "Purification of Scandium Extracted from Laterite Ore", outlining the results of a number of pilot-scale tests on Nyngan resource material, and estimated recoveries and grades of scandium oxide product. The report was independently prepared by Hazen and is the final in a series of three phases of semi-continuous pilot plant scale test-work completed by Hazen during 2011. Work was finalized in late November.

Highlights of the 2011 Hazen semi-continuous pilot plant test-work are as follows:

- Results of conventional contained sulfuric acid bake and water leach systems, at atmospheric pressure, demonstrated scandium recoveries averaging 75%,
- Results of conventional solvent extraction ("SX") on the pregnant leach solution, demonstrated scandium recoveries exceeding 99%,
- Results on final stage precipitation of scandium oxide, focused on highest combined purity and recovery, demonstrated scandium recoveries of 97.5%, at purity levels of 97.5% Sc2O3,
- Overall recovery results were 70% to 80%, based on ore type (limonite or saprolite), and
- All process assumptions were based on standard and accepted techniques for ore preparation, leaching, solvent extraction and final product preparation.

In February, 2011 EMC announced results of a series of laboratory-scale tests investigating the production of scandium-aluminum (Sc-Al) alloys directly from aluminum oxide and scandium oxide feed materials, prepared by the CSIRO. The overall objective of this research was to demonstrate and commercialize the production of Sc-Al master alloy using impure scandium oxide as the scandium source, potentially significantly improving the economics of scandium aluminum master alloy production.

Environmental Permitting Work

In April, 2011 EMC announced a general progress report on the project which outlined a series of environmental work steps designed to advance the Environmental Impact Study (EIS). Work steps included both ground and surface water assessments, along with other assessments of Aboriginal, ecology, traffic, noise and air quality matters.

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All of this work has subsequently been completed, including 8 water bores with ongoing test monitoring equipment, and reports on the various other targeted assessments, without material issues in any area. An aerial photography and contour mapping program was also completed, to support the feasibility study work regarding location of site facilities.

On January 18, 2012 EMC announced that that key elements of environmental site work on the Nyngan Scandium Project have been completed and a Conceptual Project Development Plan (CPDP) submitted to the NSW, Australia state regulators. The CPDP submission forms the basis for an Environmental Impact Study ("EIS"), the foundation environmental document required for a mining permit in the state.

Specific EIS and property work, contained in the CPDP, completed by year end 2011:

- Draft ground water assessment study finalized and submitted to regulators,
- Surface water assessment results favorable, State review ongoing,
- Aboriginal heritage study finalized, no areas of significance,
- Soils study finalized, no issues, and
- Property aerial photography and contour mapping completed, location of site facilities defined.

Continuing EIS work underway:

- License applications (6), for access to groundwater as generated from property water bores have been submitted,
- Flora and fauna studies are ongoing; to-date no significant issues have arisen, and
- Traffic, noise and air quality baseline monitoring are ongoing.

The environmental work was performed under direction from R. W. Corkery & Co., (Orange, NSW, Australia), and formed part of the SNC-Lavalin NI 43-101 Nyngan feasibility study.

CARLIN VANADIUM PROPERTY

We have a 100% interest in 72 unpatented mineral claims comprising the Carlin Vanadium Property, in Elko County, Nevada. The Carlin Vanadium Property is classified as a United States Property for purposes of financial statement segment information.

The property was explored by Union Carbide in the 1960 s. We have not performed any exploration on this property, however in 2010 we commissioned SRK Consulting of Lakewood, Colorado to prepare a technical report in the form required under NI 43-101.

Property Description and Location

The Carlin Vanadium Property consists of 72 unpatented mining claims covering 1,140 acres. The property was explored and drilled by Union Carbide Corporation in the late 1960 s resulting in a defined vanadium resource. The claim group is located in North-Central Nevada in Elko County, 7 air miles south of Carlin. The vanadium resource is centered about UTM Zone 11N geographical coordinates 574,328E, 4,495,637N (Lat 40°36 29 N, Long 116°07 17 W). Carlin, with a population of 2,500 is the largest town in the area. See figure 1 above for a location map of the property.

Geology and Mineralization

The Carlin Vanadium Property is located on the western flank of the Piñon Range, a block faulted horst of the basin and range tectonic province. The local lithologies are predominantly Paleozoic age, western assemblage, siliceous rocks transported above the Roberts Mountain Thrust. These are overlain by Tertiary age Rhyolite flows and Pliocene lake Sediments. The mineralized zones are certain stratigraphic sections of the Woodruff Formation hosting elevated concentrations of vanadium. There do not appear to be any physical markers in the lithology which indicate areas of Mineralization. All the mineralized zones are defined by chemical analysis. The Mineralization is stratigraphically controlled and appears to follow the Strike and Dip of the host lithology. Drilling to date has defined a zone of Mineralization striking north-south over 6,100 feet of length and dipping 5°- 30° west averaging 2,500 feet of down Dip extent.

Historical Work

All of the exploration and development on the property was completed by previous owners. The Carlin Vanadium Deposit was discovered in the 1960s by Union Carbide Corporation when significantly anomalous vanadium was found in samples collected by Union Carbide geologists. During 1967 and 1968 Union Carbide conducted exploration work including geological mapping, approximately 15,000 feet of trenching and 30,500 feet of drilling in 112 holes, outlining a significant 300 by 1000 meter zone of vanadium Mineralization within the current claim boundary. In 1968 Union Carbide used this work to complete a historical resource estimation of 19.69M tons @ 0.83% V_2O_5. Historical exploration was restricted to within 150m from surface with an average drill hole depth of 75 meters. This historical resource has not been verified by us or by a Qualified Person, and accordingly we cannot confirm its reliability for the purpose of current resource classification methods referred to in NI 43-101. As a result, while we consider this historical information to be relevant, the information should not be relied upon and we are not treating this information as a current mineral resource.

Union Carbide conducted extensive metallurgical testing in the 1960 s and at the time could not produce an economical process for extracting the vanadium. Developments in heap leaching technologies in the 1970 s have shown economic recoveries of vanadium from geologically similar projects such as Gibellini Vanadium Project (Rocky Mountain Resources). We are currently investigating a number of new processes to economically extract the vanadium from the Carlin deposit.

The Carlin Vanadium Property also covers an interesting gold occurrence and in 1998, Cambior Inc. and Sante Fe Pacific Mining Inc. used rock chip sampling to outline an approximate 550 feet northeast trending (>100 ppb) gold anomaly within the Devonian Woodruff Formation and drilled 20 holes totalling 2700 feet in length to test the anomalous zone. The best results were obtained in drill hole CBK-2 which intersected 0.01 oz. per ton gold from 5 to 70 feet within the Woodruff Formation immediately below the unconformity. This gold occurrence warrants further investigation to determine whether there is a possibility of a Carlin-type gold system on the property. We have not verified these historical results, and while we believe them to be relevant, we caution that this historical drilling information should not be relied upon.

Resource Estimation

In 2010, we commissioned SRK Consulting to prepare an NI 43-101 technical report and to produce a current resource estimation for the Carlin Vanadium Project. The report, titled, *NI 43-101 Technical Report on Resources EMC Metals Corp. Carlin Vanadium Project, Carlin Nevada* , was prepared by Bart Stryha, PhD of SRK Consulting, a Qualified Person as defined by NI 43-101.

The resource estimation is supported by information from the 152 rotary drill-holes totalling 36,525 feet. The drillhole database was compiled by us and verified by SRK Consulting. The resource estimation is based on a generalized geologic model and confined within a V2O5 Grade shell. Each model block was assigned an average density based on the lithologies present. Mineralization is interpreted to follow along the plane of bedding with a general orientation striking N-S dipping 5° to 25° west. Drill-hole samples were composited into 25 foot bench lengths without breaks at geologic contacts. The raw V2O5 assays were capped at 2.2% prior to compositing. The model blocks are 50ft x 50ft x 25ft in the x,y,z directions, respectively. V2O5 Grades were estimated using an Inverse Weighting to the second power. A minimum of 3 and maximum of 12 composites were required for the block Grade estimations. The results of the resource estimation provided a CIM classified Inferred Mineral Resource as shown in Table 3 below. The quality of the historical data is good and the mineral resource was classified as inferred mainly due to the fact that the rotary drilling has not been verified by modern program.

Table 3

Carlin Vanadium Project Resource Estimation				
Resource Category	**Cut off V2O5% (ppm)**	**Total Tonnes (kt)**	**Grade V2O5% (ppm)**	**Contained V2O5 (Mlbs)**
Inferred	0.3	25,400	0.515	289

The 0.3% V2O5 cut-off-grade was chosen for resource reporting based on the reasonable potential for economic extraction under a conceptual open pit mining and milling scenario. The cut-off-grade was calculated using $2.30/ton mining cost, $35/ton milling cost, $0.50/ton admin cost, 65% recovery, 95% selling pay-for, 1% freight charge, 0% royalty and a $10.46/lb V2O5 value. The V2O5 price is based on a five year trailing average value. This analysis resulted in a break-even cut-off-grade of 0.30% . The results reported in the resource statement are rounded to reflect the approximation of Grade and quantity, which can be achieved at this level of resource estimation.

COPPER KING TUNGSTEN PROPERTY

Property Description and Location

We have a 100% interest in the Copper King Property which is located in Pershing County, Nevada. The Copper King Project consists of 7 unpatented claims and 9 patented claims covering 250ha is located on the west flank of the Trinity Range in Pershing Co., Nevada (see Figure 1 above). The Copper King Property is classified as a United States Property for purposes of financial statement segment information.

Geology and Mineralization

The Copper King tungsten Mineralization is hosted within 5 separate, parallel Triassic-Jurassic Sedimentary horizons including argillite, quartzite, and marble, in contact with a Cretaceous granodiorite Intrusion. Limestone beds within the sedimentary package have been silicified forming steeply dipping, epidote-garnet skarns.

Historical Work

The Copper King Property was originally staked in the early 1900s as a copper prospect and very little is known about the early historical work until scheelite was discovered on the property in 1949. The property was mined in 1952 by Cordero Mining Company who removed 750 tons of ore and again in 1956 by Wallace and Durkin, who removed 193 tons of Ore from one of two vertical shafts.

In 1969, the property was optioned to Nevada Tungsten and Copper Inc. who completed 2,184 feet of Diamond drilling in 4 holes which ranged in depth from 279 feet to 935 feet.

In 1976, General Electric Co. acquired the property and carried out extensive mapping, sampling, and drilling.

Exploration

The Copper King project is an early stage exploration project and we are currently evaluating the property for future exploration potential.

NORWAY SCANDIUM PROPERTIES

During 2011 we entered into two option agreements with REE Mining AS of Norway, to obtain exploration rights to several properties in central and southern Norway. The Tørdal , Evje-Iveland and Hogtuva properties are classified as Norway Property for purposes of financial statement segment information.

Option agreements to acquire central Norway properties, Tørdal and Evje-Iveland were entered into in April 2011 and an option agreement for the Hogtuva property, located in southern Norway, was signed in September 2011. Both of these agreements have been renegotiated to secure 100% ownership positions for EMC.

Tørdal and Evje-Iveland Properties, Norway

The location of the Tørdal exploration property is provided in Figure 4 below.

In April of 2011, we entered into an option agreement with REE Mining AS of Norway, pursuant to which we acquired the option to earn 100% of the outstanding common shares in the capital of a Norwegian limited liability company which holds the exploration rights to two pegmatite properties, known as the Tørdal property and the Evje-Iveland property. The properties are both prospective for a grouping of specialty metals, and rare earth elements, including scandium, yttrium, tantalum, beryllium, niobium, zirconium, titanium, lithium, nickel and tin.

Terms of the REE Option Agreement provided for a two stage earn-in option including cash payments totalling $650,000, work commitments totalling $250,000, and an EMC share grant of 1 million EMC shares, with payments due in October 2012 and June 2013.

On January 16, 2013 we announced a renegotiated earn-in immediately accelerating our ownership of the Tørdal exploration licenses to 100%. The renegotiated agreement canceled all outstanding cash payments ($500,000), and all remaining work commitments, in return for payment of certain property costs and other costs totalling $65,000 in December/January 2013, the 1 million EMC share grant, and a 1% net smelter return (NSR) on production proceeds from the property. As part of the amended agreement, EMC relinquished all rights to the Evje-Iveland property, which were returned to REE Mining.

2012 Tørdal Field Exploration

On February 14, 2013 we announced promising results from field exploration work on the Tørdal property during the summer and fall months of 2012, focussed on scandium-bearing pegmatites. The 2012 work included independent assay results of pegmatite rock samples taken from one specific property area, and also includes an extensive pegmatite mapping program covering approximately 30 sq km. The assay results indicated the presence of high levels of scandium and various rare earth elements (REE s), including heavy rare earth elements (HREE s) in particular. Field XRF readings indicated elevated scandium content in hundreds of large and small pegmatite bodies found and mapped in the reconnaissance area.

Highlights of the results of the 2012 field exploration are as follows:

- Tørdal 2012 assays of pegmatite rocks show presence of both scandium and REE s,
- Best scandium assays exceed 1,600 ppm,
- Promising HREE assay results from pegmatites with gadolinite mineralization,
- Host rock mineralization points to higher grade scandium or HREE contents,
- 2012 summer exploration program mapped and sampled over 300 pegmatites,
- A total of 1,940 Niton XRF scandium readings were taken on whole rock samples, and
- Overall program results at Tørdal are very encouraging and warrant expanded exploration.

Assay Results of Grab Samples at Tørdal

The 2011 summer exploration program on the Tørdal property consisted of reconnaissance, surface soil sampling, and limited pegmatite mapping work in a relatively small area north of the village of Kleppe, in Southern Norway.

As a follow-on from that 2011 program, the company then returned to the same area and conducted a series of blasts , using small explosive charges to generate whole rock samples on select exposed pegmatites, at the locations of the best soil sample results. The exploration team planned 9 blasts and conducted 8, on 5 different pegmatite bodies, from which they assembled 23 grab samples for analysis and assay by OMAC Laboratories in Ireland. Assay results on these samples were received in Q1 2012 in time to help formulate the 2012 summer/autumn season pegmatite mapping program, conducted on a much wider area.

Independent assay results on 20 of the 23 samples, covering all 5 targeted pegmatites, are shown below.

	Sample Location		Rare Earth Assay Results			Scandium
Sample Type	**Sample ID #**	**Blast ID #**	**HREE ppm**	**TREE ppm**	**% HREE**	**Sc ppm**
Whole Rock Samples	TD1	7	307	427	72.0%	38
	TD2	7	142	204	69.7%	334
	TD3	3	104	138	75.0%	86
	TD5	4	460	533	86.4%	111
	TD6	2	177	223	79.3%	67
	TD7	9	180	219	82.0%	26
	TD8	8	935	1,028	90.9%	77
Select Mica-Phase Samples	TD9	7	130	171	75.8%	568
	TD10	3	92	123	74.5%	665
	TD11	9	159	191	82.8%	1,459
	TD13	1	52	59	88.1%	853
	TD15	3	724	883	81.9%	1,690
Select Garnet-Phase Samples	TD17	8	1,581	1,656	95.5%	141
	TD18	7	305	357	85.6%	23
	TD19	2	2,443	2,789	87.6%	246
	TD21	2	722	860	84.0%	150
Select Gadolinite-Phase	TD14	1	227,500	266,430	85.4%	26
	TD22	3	162,500	186,480	87.1%	64
	TD23	location 32	267,400	313,530	85.3%	<1
NOTE: All blast samples taken from Kleppe area (Area 1), total of 5 unique pegmatites						

Assay results are as-reported elemental assay results from OMAC Laboratories, and are not converted to oxide equivalent (REO & Sc_2O_3). Heavy rare earth elements abbreviated HREE ; and include Yttrium;Total rare earth elements abbreviated TREE .

The numbered assay samples were formed either by random selection of fresh (un-weathered) whole rock material broken loose from individual pegmatite bodies, or alternatively, based on selectively collecting fresh rock material that was clearly (1) garnet-laden, (2) mica-laden, or showed clear visible (3) gadolinite mineralization. Gadolinite is a beryllium and rare earth-bearing mineral with the chemical formula [$(Ce,La,Nd,Y)_2\ FeBe_2Si_2O_{10}$]. The intent was to determine from assay results if certain visible mineralization correlated to the presence and concentrations of target elements; specifically scandium, rare earth elements (REE s), or other metals of interest and value.

The results in the assay table indicate that all of the selected pegmatites contain interesting levels of both REE s and scandium. In general, all of the pegmatites contained both target elements, while the mica phase appears to hold the higher scandium concentrations with small REE additions, and the gadolinite phase holds the highest REE concentrations and small scandium additions. The presence of garnet material in samples tended to generate

interesting but moderate values for both REE s and scandium. Assay work was designed to identify 30 specific elements, including all 16 REE elements plus scandium, and the relative concentration of heavy REE s was of particular interest. The mica and garnet grab sample materials had generally only trace levels of thorium and uranium (average <15 ppm), while the gadolinite grab sample materials had thorium levels between 2,500-5,000 ppm, and uranium levels between 500-1,300 ppm. A full table of OMAC assay results related to these 23 sample analyses is available on EMC s website at www.emcmetals.com.

Reconnaissance Results Extended Pegmatite Mapping Program at Tørdal

Following on from the 2011 work and the 2012 assay results, EMC conducted an expanded 2012 summer work reconnaissance program at both Tørdal and Evje-Iveland, from July through October. The goals of the 2012 program were to develop detailed mapping of outcropping pegmatite fields over a much broader area than the 2011 program, while also conducting field sampling of scandium mineralization on those pegmatites using a hand-held Niton XRF Analyzer.

The 2012 program concentrated on five separate areas (approximately 30 sq km) as can be seen in the map below:

A total of 1,940 Niton XRF readings were logged on whole rock and pegmatite mineral separates, logged against individually mapped and numbered pegmatite bodies. The XRF readings ranged up to +6,000 ppm scandium (on a mineral separate), and averaged 661 ppm on 1,504 total logged readings above the instrument s 20 ppm detection limit. XRF readings focussed on scandium data collection only, although the team diligently noted the visible presence of gadolinite and amazonite mineralization.

The reader is cautioned that hand-held Niton XRF readings are not the same as laboratory assays, and are not NI 43-101 compliant with regard to estimating resource grades. However, the Company is confident that these data readings are highly useful in confirming and shaping the next stage of the exploration program on this property.

A summary of results by area is as follows:

- Area 1 (Kleppe). Mapped more than 50 pegmatite bodies. Best average XRF Sc readings from 1,000-1,500 ppm, some very large surface expressions. Gadolinite present.
- Area 2 (Heftetjern); Partially mapped more than 40 pegmatite bodies, many large surface expressions, green amazonite mineralization. Better XRF Sc readings from 500-1,500 ppm.
- Area 3 (Solli); Mapped numerous large and small pegmatites. Generally lower XRF Sc readings, ranging 300-700 ppm. Red feldspars, quartz and gadolinite mineralization present.
- Area 4 (South Kleppsvatn); Partially mapped large area containing more than 80 pegmatites, generally mica-based. Typical XRF Sc readings in the 300-900 ppm range, with some reaching 1,500 ppm Sc.
- Area 5 (Buvatn); Partially mapped, numerous pegmatite bodies, some very large. Typical XRF Sc readings in the 300-1,000 ppm range. Old feldspar quarries, amonizite mineralization present.

Similar work done at Evje-Iveland (total 180 sq km) identified several interesting target areas, but scandium readings were not sufficiently attractive when compared to results at Tørdal. These observations led to the decision to drop Evje-Iveland, as part of an amended agreement which also enabled EMC to achieve an immediate 100% earn-in on Tørdal.

The exploration results of the 2012 work program also allowed EMC to selectively reduce property holdings at Tørdal in January 2013. The property has been reduced from 140 sq km to 90 sq km, with lower ongoing exploration license holding costs as a result.

Next Steps in Norway Exploration Program

EMC s mapping and sampling work has confirmed that much of the Tørdal property is heavily populated with complex, near-surface pegmatite bodies. Based on hand-held XRF readings and mineralogy, these pegmatites show excellent promise for significant scandium enrichment, particularly within bodies containing micas, and for REE mineralization where the rare earth silicate gadolinite is present. Based on the results of 2012 exploration work, planning for exploration work to be conducted during 2013 is underway.

Qualified Person and Quality Assurance/Quality Control

Sampling methods followed industry quality control standards. Mr. Kjell Nilsen, an independent geologist consultant currently employed by EMC, conducted the reconnaissance and sampling on the property. Individual whole rock grab samples were collected by hand shovel, from areas where blasted material could be seen to have come from blast points on pegmatite bodies. The assayed samples were individually bagged, sealed, logged on the grid map as to location, boxed in a container suitable for mailing, and sent by express mail to OMAC Laboratories Limited in Galway, Ireland for testing. Assay testing on the samples utilized an ICP-MS spectrometer (Inductively Coupled Plasma-Mass Spectrometry) to test for numerous elements, specifically scandium. The numerous Niton XRF (X-ray Fluorescence) readings were taken at field locations, logged and identified with individual numbered pegmatites, located on grid maps, by the field geology team. Mr. Willem Duyvesteyn, Chief Technology Officer of EMC, is the Qualified Person who is responsible for the design and conduct of the exploration program, and reviewed the program results.

Hogtuva Scandium Exploration Property:

The location of the Hogtuva exploration property is provided in Figure 5 below.

On September 1, 2011 EMC entered into an option agreement with REE pursuant to which EMC has an option to earn a 100% interest in the exploration rights to three scandium and beryllium exploration sites in Central Norway. To earn 100% of the exploration rights, EMC was required to pay REE a total of $150,000 over 18 months (including $50,000 paid on the agreement date) and up to 200,000 shares of EMC common stock. On January 16, 2013 we announced a renegotiated earn-in immediately accelerating our ownership of the Hogtuva exploration licenses to 100%. The renegotiated agreement canceled all outstanding cash payments ($150,000) and stock grants in return for a 1% net smelter return (NSR) on production proceeds from the property. The three exploration sites cover a total of approximately 80 square kilometers prospective for scandium, beryllium and other specialty metals.

FAIRFIELD SCANDIUM PROPERTY

On September 13, 2011 EMC Metals Corp. announced that it entered into an option agreement with Mineral Exploration Services LLC (MES) of Reno, Nevada, pursuant to which we acquired an option to earn a 100% interest in a patented mining claim and former scandium property, known as The Little Green Monster, near the town of Fairfield, Utah. The property represents a scandium phosphate exploration target and is the site of a historical small underground scandium mining operation. In addition to the MES option agreement, we staked an additional 42 claims in areas of interest surrounding the core property and site of historical activity. The Fairfield Scandium Property is classified as a United States property for purposes of financial statement segment information.

A limited scale exploration program completed during 2012 did not produce adequate results to support further exploration. As a result, we have cancelled the option agreement and allowed the mineral claims to terminate.

FOSTUNG TUNGSTEN PROPERTY

Pursuant to the terms of a purchase and sale agreement dated June 26, 2009, as amended on July 22, 2009 and September 14, 2009, between us and Breakwater Resources Ltd., in October of 2009, we issued 500,000 of our common shares to Breakwater as consideration for a 100% interest in the Fostung property located in Ontario, subject to a 1% Net Smelter Returns Royalty. The property was placed on care and maintenance in 2008.

In May of 2011, we completed the sale of all of our interest in the Fostung property to a wholly owned subsidiary of Janus Resources, Inc., a Nevada company, for CAD$500,000.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any pending legal proceedings and, to the best of our knowledge, none of our property or assets are the subject of any pending legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

The Company, through its wholly-owned subsidiary, Springer Mining Company, owns the Springer mine and mill. The property was placed under care and maintenance in 2008 and there are no active mining operations. The Company has no mine safety violations or other regulatory matters to report.

PART II

ITEM 5. MARKET FOR REGISTRANTS COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Price Range of Common Shares

The principal market on which our common shares are traded is the Toronto Stock Exchange. Our common shares commenced trading on the Toronto Stock Exchange on April 24, 2008 under the symbol GP . Effective March 11, 2009, the common shares were listed and posted for trading on the Toronto Stock Exchange under the symbol EMC . The following table shows the high and low trading prices and average trading volume of our common shares on the Toronto Stock Exchange for the periods indicated.

Year	High (C$)	Low (C$)
Fiscal Year ended December 31, 2012		
First quarter	0.175	0.07
Second quarter	0.095	0.06
Third quarter	0.075	0.04
Fourth quarter	0.07	0.035
Fiscal Year ended December 31, 2011		
First quarter	0.43	0.24
Second quarter	0.36	0.15
Third quarter	0.20	0.08
Fourth quarter	0.17	0.09

Exchange Rates

We maintain our books of account in United States dollars and references to dollar amounts herein are to the lawful currency of the United States except that we are traded on the Toronto Stock Exchange and, accordingly, stock price quotes and sales of stock are conducted in Canadian dollars. The following table sets forth, for the periods indicated, certain exchange rates based on the noon rate provided by the Bank of Canada. Such rates are the number of Canadian dollars per one (1) U.S. dollar. The high and low exchange rates for each month during the previous six months were as follows:

	High	Low
February 2013	1.0285	0.9960
January 2013	1.0078	0.9839
December 2012	0.9952	0.9841
November 2012	1.0028	0.9927
October 2012	1.0004	0.9763
September 2012	0.9902	0.9710

The following table sets out the exchange rate (price of one U.S. dollar in Canadian dollars) information as at each of the years ended December 31, 2011 and 2012.

	Year Ended December 31 (Canadian $ per U.S. $)	
	2011	2012
Rate at end of Period	1.0170	0.9949
Low	0.9449	0.9710
High	1.0604	1.0418

As of March 22, 2013, there were 62 registered holders of record of the Company s common shares and an undetermined number of beneficial holders.

Dividends

We have not paid any cash dividends on our common shares since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business.

Securities Authorized for Issuance Under Compensation Plans

The following table sets forth information as at December 31, 2012 respecting the compensation plans under which shares of the Company s common stock are authorized to be issued.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	13,546,250	C$0.14	11,257,500
Equity compensation plans not approved by security holders	nil	nil	nil
Total	**13,546,250**	**C$0.14**	**11,257,500**

Purchases of Equity Securities by the Company and Affiliated Purchasers

Neither the Company nor an affiliated purchaser of the Company purchased common shares of the Company in the quarter ended December 31, 2012.

Unregistered Sales of Equity Securities.

On December 28, 2012, EMC Metals Corp. completed a private placement of 2,000,000 shares of common stock at a price of $0.05 (CAD$0.05) per share for total proceeds of $100,482 (CAD$100,000). The securities were sold to an accredited investor pursuant to Rule 506 of Regulation D and to a non-US person pursuant to Regulation S under the United States *Securities Act of 1933*.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

Overview

EMC is a specialty metals and alloys company focusing on scandium, tungsten, molybdenum, vanadium, and other specialty metals. We intend to utilize our patented technologies and know-how to maximize opportunities in these and other specialty metals.

The Company was formed in 2006, under the name Golden Predator Mines Inc. As part of a reorganization and spin-out of our precious metals portfolio in March 2009, we changed our name to EMC Metals Corp. We currently trade on the Toronto Stock Exchange under the symbol EMC .

Our most advanced asset is the Springer Tungsten Mine, a fully constructed mine and mill asset in Nevada, USA. The Springer mine is currently not operating, and we are seeking partnership/financing arrangements to secure capital and management needed for facility restart.

We hold a 100% interest in the Nyngan scandium project in New South Wales, Australia, and after settling a protracted legal dispute with our previous partner, we are reassessing technical planning and schedule in order to advance project development. We also own three other properties: the Hogtuva (central Norway) and Tørdal (southern Norway) scandium properties, and the Carlin vanadium property, in Nevada, USA. We sold our Fostung tungsten property in Ontario, Canada in June, 2011.

We acquired rights to metallurgical processing know-how as part of the acquisition of The Technology Store (TTS) during the prior year, which we are utilizing to gain access to a number of specialty metals opportunities.

Our focus during 2012 regarding the Springer Mine included maintaining that asset on standby mode, and organizing and pursuing a reevaluation of the project mine operations plan and mineral resource in order to enable a facility restart. We advanced the Nyngan scandium project through completion of a project feasibility study, however a legal dispute with our former partner limited project advancement during 2012. Field exploration work on the Tørdal scandium property during the summer and fall months of 2012 yielded promising results. We also investigated and rejected other specialty metals opportunities.

RESULTS FOR THE YEAR ENDED DECEMBER 31, 2012

Liquidity and Capital Resources

At December 31, 2012, we had current assets of $299,550 including cash of $190,215 and current liabilities of $7,198,560 (including notes due in July and August of 2012 totaling $6,542,061); as compared to a working capital of ($58,920) including cash of $791,438 at December 31, 2011.

During the year ended December 31, 2012, we received cash of $790,508 (2011 - $580,520) for stock issuances. At December 31, 2012, we had a total of 13,546,250 stock options exercisable between C$0.10 and C$0.315 which has the potential upon exercise to generate a total of C$1,947,363 in cash over the next four and a half years. There is no assurance that these securities will be exercised.

Our continued development is contingent upon our ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to us; however, management is committed to pursuing all possible sources of financing in order to execute our business plan.

Our major capital requirements in the next 12 months relate mainly to earning our 100% interest in the Nyngan Project by paying an AU$1,200,000 to Jervois by June 30, 2013. Under the terms of our note agreement to purchase the Cosgrave ranch adjacent to the Springer mine, we must pay $3,750,000.00 by July 3, 2013. Also, EMC must repay $3,000,000 by August 15, 2013 with respect to the convertible debenture issued in February of 2012. $2,000,000 of this debenture is convertible into shares at the discretion of the lender at an exercise price of C$0.20 per share.

The Company will need additional funding to meet the commitments shown above, and will seek to raise additional equity financing in the short term. New debt to replace the current notes due in July and August of 2013 is under consideration as well as seeking restructuring of these notes.

Results of Operations

Quarter ended December 31, 2012

The net loss for the quarter decreased by $2,566,355 to $1,623,015 from $4,189,370 in the prior year, mainly as a result of the write-down of the Cosgrave ranch at the Springer mine charge during 2011 . Individual items contributing to this decrease are as follows:

Q4 2012 vs. Q4 2011 - Variance Analysis		
Item	**Variance Favourable / (Unfavourable)**	**Explanation**
Write-off of Cosgrave Ranch	$ 2,356,315	In the fourth quarter of 2011 an impairment charge of $2,800,000 was taken on the Cosgrave ranch. We recognized additional impairment of $443,685 in the fourth quarter of 2012.
Professional fees	($71,380)	Legal costs associated with the Nyngan project caused this unfavourable variance.
General and administrative	$ 4,363	Quarter to quarter, the General and Administrative costs were almost the same resulting in this small favorable variance.
Stock-based compensation	$ 104,903	The current expense is lower than in the prior year as a result of fewer options vesting.
Amortization	$ 57,271	A significant portion of the assets placed in service at our Springer facility have been completely depreciated requiring no amortization as compared to the corresponding quarter of 2011.
Interest expense	($65,989)	The convertible debenture issued in February of 2012 resulted in higher interest charges during 2012.
Travel and entertainment	$ 42,647	Decreased travel to project sites in the current quarter resulted in a favorable variance.
Salaries and benefits	$ 100,904	In association with the transition from G&A purchased services during the last quarter of 2011, certain costs allocated to the consulting expense category in the first 9 months were reallocated to salaries expense, resulting in this favourable variance during 2012. Absent these adjustments, costs in this expense category would be comparable from quarter to quarter.

Q4 2012 vs. Q4 2011 - Variance Analysis		
Item	**Variance Favourable / (Unfavourable)**	**Explanation**
Foreign exchange gain	($275,438)	The loss results mainly from the conversion of Canadian dollar denominated monetary item balances to US dollar denominated balances for reporting purposes.
Consulting	($335,590)	In the 2011 quarter certain costs allocated to this expense category in the first 9 months were reallocated to exploration expense and salaries expense categories, no similar reallocation occurred during 2012 resulting in this unfavourable variance.
Exploration	$ 646,218	Exploration costs decreased during the current quarter due primarily to very low activity at the Nyngan project as the work required to gain our earn-in was largely completed in Q4 of 2011.
Insurance	$ 14,456	In the 2011 quarter expenses included an adjustment for under accrued expenses. No such adjustment occurred during 2012, resulting in the favourable variance.

Results of Operations for the Year ended December 31, 2012

The net loss for the year decreased by $2,190,736 to $4,965,297 from $7,156,033 in the prior year, mainly as a result of a significantly reduced asset mineral impairment charge in the current year. Individual items contributing to this decrease are as follows:

2012 vs. 2011 - Variance Analysis		
Item	**Variance Favourable / (Unfavourable)**	**Explanation**
Write-off of mineral properties	$ 2,356,315	In the fourth quarter of 2011 an impairment charge of $2,800,000 was taken on the Cosgrave ranch. We recognized additional impairment of $443,685 in the fourth quarter of 2012.
Stock-based compensation	($35,673)	In 2012, a greater number of options were issued and a large portion of those option vested immediately resulting in immediate expensing. In 2011 the bulk of options vested over a two year period.

2012 vs. 2011 - Variance Analysis		
Item	**Variance Favourable / (Unfavourable)**	**Explanation**
Foreign exchange loss	$ 38,891	The lower loss in 2012 is due to the stabilization of the US dollar against both the Canadian and Australian dollars. This resulted in less fluctuation in this expense element.
Salaries and benefits	($149,879)	The negative variance results from a higher headcount in 2012 due to the placing on staff a manager at the Springer mine as well as the full year salary of our CFO when compared to the prior year.
Interest expense	($507,246)	With the issuance of convertible debt in 2012 of $3,000,000 interest costs are higher when compared with 2011 when no such debt existed.
General and administrative	$ 119,766	The favourable variance results from efficiencies gained by opening and staffing a corporate office to perform G&A previously obtained through a purchased services contract.
Exploration costs	$ 1,014,534	Exploration costs decreased during 2012 due primarily to completion of earn-in spending at the Nyngan project. In 2011 larger exploration costs were incurred as we ramped up towards the completion of a Feasibility Study on our scandium project in Australia.
Amortization	$ 134,873	A significant portion of the assets placed in service at our Springer facility have been completely depreciated in the current year thus requiring no amortization as compared to 2011.
Professional fees	($1,874)	Costs were similar to the prior year.
Consulting	($151,390)	With the efforts to bring the Springer mine back into operation, the use of consultants to provide independent studies and valuations were used in 2012. No such consulting services were used in 2011.
Insurance	($16,961)	The expansion of the Board of directors resulted in higher D&O insurance costs in 2012. Also there was a general increase in insurance rates implemented during the 2012 year.
Disposition of assets	($487,917)	During 2011 we disposed of the Fostung property for a gain of $487,917.

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2012 vs. 2011 - Variance Analysis		
Item	**Variance Favourable / (Unfavourable)**	**Explanation**
Travel and entertainment	$ 114,880	During 2012 less travel was incurred as the focus of activities shifted to North America based assets Springer. In 2011 travel to Australia for work on the Nyngan project was required. Fewer trips to Australia resulted in the significant favourable variance recorded here.
Change in fair value of derivative liability	($231,262)	In 2011 we recognized a positive change in the value of a derivative liability.

Cash flow discussion for the year ended December 31, 2012 compared to December 31, 2011

The cash outflow from operating activities decreased by $641,345 to $3,505,141 (2011 $4,146,486) due to lower exploration costs.

Cash flows from investing activities decreased by $183,517 to $(36,087) (2011 ($147,430)) due mainly to the gain recognized in 2011 on the sale of the Fostung property.

Cash inflows from financing activities increased by $2,457,578 to $3,038,098 (2011 - $580,520) as a result of raising funds through the taking out of a convertible debenture and from larger private placements during the year.

Summary of quarterly results

	2012				2011			
	Q4	**Q3**	**Q2**	**Q1**	**Q4**	**Q3**	**Q2**	**Q1**
Net Sales	-	-	-	-	-	-	-	-
Net Income (Loss)	(1,623,015)	(1,148,216)	(1,386,161)	(807,905)	(4,189,370)	(2,008,200)	(633,233)	(325,230)
Basic and diluted Net Income (Loss) per share	(0.01)	(0.01)	(0.01)	(0.00)	(0.03)	(0.01)	(0.01)	(0.00)

Financial Position

Cash

The decrease in cash of $601,223 to $190,215 (2011 - $791,438) results from exploration activities, Springer care and maintenance costs, and general and administrative costs incurred during the year 2012.

Marketable securities

The marketable securities held at December 31, 2011 were disposed of in December of 2012. EMC does not hold any marketable securities as at December 31, 2012.

Property, plant and equipment

Property plant and equipment consists of land and water rights in Nevada, the Springer plant and equipment, and various other items of property plant and equipment. The increase of $30,035 to $30,193,679 at December 31, 2012 (2011 - $30,163,644) is due to the change in the translation from Canadian currency to US currency for the purpose of presentation which is offset by amortization and the write down of Cosgrave Ranch land and water rights.

Mineral interests

Mineral interests have increased by $84,833 to $753,182 at December 31, 2012 (2011 - $668,349) due mainly to the additions of scandium properties in Norway.

Notes Payable and Accrued Liabilities

Notes payable and accrued liabilities have increased by $115,613 to $656,499 at December 31, 2012 (2011 $540,886) due mainly to increased levels of reports commissioned to aid in the evaluation of the Springer property.

Promissory notes and convertible debenture payable (current and long-term)

Long-term promissory notes payable decreased by $3,750,000 to nil (2011 - $3,750,000) which is due to the promissory note amount becoming current during the 2012 year.

Current promissory notes payable and convertible debenture increased by $6,157,674 due to the long-term note payable for the purchase of the Cosgrave ranch of $3,750,000 becoming current and the issuance of convertible debt in February of 2012 which matures in 2013. This was partially offset by the repayment of $500,000 due in respect of the Technology Store purchase made in 2009.

Capital Stock

Capital stock increased by $830,713 to $87,310,708 (2011 - $86,479,995) as a result of the issuance of shares upon the amending of the agreement for our properties in Norway and also due to two private placements that occurred during the year.

Additional paid-in capital increased by $584,550 to $2,033,718 (2011 - $1,449,168) as a result of the expensing of stock options which was offset by an adjustment for currency translation adjustments.

Certain treasury shares were cancelled during 2011, bringing their value to $1,264,194. This balance remained the same throughout the 2012 fiscal period.

Liquidity and Capital Resources

At December 31, 2012, we had current assets of $299,550 including cash of $190,215 and current liabilities of $7,198,560 (including notes due in June and August of 2012 totaling $6,542,061); as compared to a working capital of $58,290 including cash of $791,438 at December 31, 2011.

During the year ended December 31, 2012, we received cash of $790,508 (2011 - $580,520) for stock issuances and $3,000,000 from the issuance of promissory notes and debentures. At December 31, 2012, a total of 12,835,250 stock options exercisable between C$0.07 and C$0.31 have the potential upon exercise to generate a total of C$1,947,363 in cash over the next five years. There is no assurance that these securities will be exercised.

Our continued development is contingent upon our ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to us; however, management is committed to pursuing all possible sources of financing in order to execute our business plan.

Off-balance sheet arrangements

At December 31, 2012, we had no material off-balance sheet arrangements such as guarantee contracts, contingent interest in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risk to us.

ADDITIONAL INFORMATION AND ACCOUNTING PRONOUNCEMENTS

Outstanding share data

At March 25, 2013 we had 165,358,337 issued and outstanding common shares, 13,813,750 outstanding stock options at a weighted average exercise price of C$0.14.

Critical Accounting Estimates

The preparation of financial statements in conformity with generally accepted accounting policies requires our management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on past experience, industry trends and known commitments and events. By their nature, these estimates are subject to measurement uncertainty and the effects on the financial statements of changes in such estimates in future periods could be significant. Actual results will likely differ from those estimates.

Stock-based compensation

We use the Black-Scholes option pricing model to calculate the fair value of stock options and compensatory warrants granted. This model is subject to various assumptions. The assumptions we make will likely change from time to time. At the time the fair value is determined, the methodology that we use is based on historical information, as well as anticipated future events. The assumptions with the greatest impact on fair value are those for estimated stock volatility and for the expected life of the instrument.

Deferred income taxes

We account for tax consequences of the differences in the carrying amounts of assets and liabilities and our tax bases using tax rates expected to apply when these temporary differences are expected to be settled. When the deferred realization of income tax assets does not meet the test of being more likely than not to occur, a valuation allowance in the amount of the potential future benefit is taken and no future income tax asset is recognized. We have taken a valuation allowance against all such potential tax assets.

Mineral properties and exploration and development costs

We capitalise the costs of acquiring mineral rights at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. Our recoverability evaluation of our mineral properties and equipment is based on market conditions for minerals, underlying mineral resources associated with the assets and future costs that may be required for ultimate realization through mining operations or by sale. We are in an industry that is exposed to a number of risks and uncertainties, including exploration risk, development risk, commodity price risk, operating risk, ownership and political risk, funding and currency risk, as well as environmental risk. Bearing these risks in mind, we have assumed recent world commodity prices will be achievable. We have considered the mineral resource reports by independent engineers on the Springer and Nyngan projects in considering the recoverability of the carrying costs of the mineral properties. All of these assumptions are potentially subject to change, out of our control, however such changes are not determinable. Accordingly, there is always the potential for a material adjustment to the value assigned to mineral properties and equipment.

Recent Accounting Pronouncements

In April 2010, the Financial Accounting Standards Board (FASB) issued ASU 2010-13, Compensation Stock Compensation (Topic 718), amending ASC 718. ASU 2010-13 clarifies that a stock-based payment award with an exercise price denominated in the currency of a market in which the entity s equity securities trade should not be classified as a liability if it otherwise qualifies as equity. ASU 2010-13 also improves US GAAP by improving consistency in financial reporting by eliminating diversity in practice. ASU 2010-13 is effective for interim and annual reporting periods beginning after December 15, 2010 (January 1, 2011 for us). We are currently evaluating the impact of ASU 2010-09, but do not expect its adoption to have a material impact on our financial reporting disclosures.

In December 2010, the FASB issued ASU 2010-29, which contains updated accounting guidance to clarify the acquisition date that should be used for reporting pro forma financial information when comparative financial statements are issued. This update requires that we should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. This update also requires disclosure of the nature and amount of material, nonrecurring pro forma adjustments. The provisions of this update, which are to be applied prospectively, are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010, with early adoption permitted. The impact of this update on our consolidated financial statements will depend on the size and nature of future business combinations.

Financial instruments and other risks

Our financial instruments consist of cash, subscriptions receivable, receivables, accounts payable and accrued liabilities, due to related parties, and promissory notes payable. It is management's opinion that we are not exposed to significant interest, currency or credit risks arising from our financial instruments. The fair values of these financial instruments approximate their carrying values unless otherwise noted. We have our cash primarily in one commercial bank in Vancouver, British Columbia, Canada.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The Consolidated Financial Statements of the Company and the notes thereto are attached to this report following the signature page and Certifications.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

For the fiscal years ended December 31, 2012 and 2011, we did not have any disagreement with our accountants on any matter of accounting principles, practices or financial statement disclosure.

ITEM 9A. CONTROLS AND PROCEDURES

The Company s management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company s management, including our principal executive officer and our principal financial officer, evaluated the effectiveness of disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, the principal executive officer and principal financial officer concluded that as of the end of the period covered by this report, the Company has maintained effective disclosure controls and procedures in all material respects, including those necessary to ensure that information required to be disclosed in reports filed or submitted with the SEC (i) is recorded, processed, and reported within the time periods specified by the SEC, and (ii) is accumulated and communicated to management, including the principal executive officer and principal financial officer, as appropriate to allow for timely decision regarding required disclosure.

There have been no changes in internal control over financial reporting that occurred during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Information with respect to Items 10 through 14 is set forth in the definitive Proxy Statement to be filed with the Securities and Exchange Commission on or before April 30, 2013 and is incorporated herein by reference. If the definitive Proxy Statement cannot be filed on or before April 30, 2013, the Company will instead file an amendment to this Form 10-K disclosing the information with respect to Items 10 through 14.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENTS SCHEDULES

Financial Statements

The following Consolidated Financial Statements are filed as part of this report.

Description	Page
Financial statements for the years ended December 31, 2012 and 2011 and audit reports thereon.	F-1

Exhibits

The following table sets out the exhibits filed herewith or incorporated herein by reference.

Exhibit	Description
3.1*	Certificate of Incorporation, Certificate of Name Change, Notice of Articles
3.2*	Corporate Articles
10.1*	2008 Stock Option Plan
10.3**	Stock Purchase Agreement dated November 19, 2009 between EMC Metals Corp., Willem P.C. Duyvesteyn, and Irene G. Duyvesteyn
10.4*	Exploration Joint Venture Agreement dated February 5, 2010 between EMC Metals Corp. and Jervois Mining Limited
10.5*	Services Agreement between EMC Metals Corp. and George Putnam dated May 1, 2010
10.6*	Extension Agreement dated September 29, 2010 between EMC Metals Corp. and Jervois Mining Limited
10.7*	Stock Purchase Agreement dated November 16, 2010 between EMC Metals Corp. and Golden Predator US Holding Corp.
11.1	Statement of Computation of Per Share Earnings for the Year Ended December 31, 2012
14.1	Board of Directors Code of Conduct
21.1*	List of Subsidiaries
31.1	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934
31.2	Certification of Principal Financial Officer Pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934
32.1	Section 1350 Certification of the Principal Executive Officer
32.2	Section 1350 Certification of the Principal Financial Officer

* Previously filed as exhibits to the Form 10 filed May 24, 2011 and incorporated herein by reference.
** Previously filed as an exhibit to the Form 10/A filed July 22, 2011 and incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

EMC METALS CORP.

By: /s/ George Putnam
George Putnam
President and Principal Executive Officer

Date: March 25, 2013

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ George Putnam George Putnam	President, Principal Executive Officer, and Director	March 25, 2013
/s/ William Harris William Harris	Chairman and Director	March 25, 2013
/s/ Willem Duyvesteyn Willem Duyvesteyn	Director	March 25, 2013
/s/ Warren Davis Warren Davis	Director	March 25, 2013
/s/ Barry Davies Barry Davies	Director	March 25, 2013
/s/ John Grubb John Grubb	Director	March 25, 2013
/s/ Edward Dickinson Edward Dickinson	Principal Accounting Officer and Principal Financial Officer	March 25, 2013

(An Exploration Stage Company)

CONSOLIDATED FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of
EMC Metals Corp.

We have audited the accompanying consolidated balance sheets of EMC Metals Corp. as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, cash flows and changes in stockholders' equity for the years ended December 31, 2012 and 2011 and the for the period from incorporation on July 17, 2006 to December 31, 2012. EMC Metals Corp.'s management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of EMC Metals Corp. as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years ended December 31, 2012 and 2011 and for the period from incorporation on July 17, 2006 to December 31, 2012 in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming EMC Metals Corp. will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, EMC Metals Corp. generated negative cash flows from operating activities during the past year and has an accumulated deficit of $61,027,496 for the year ended December 31, 2012. This raises substantial doubt about EMC Metals Corp. s ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

“DAVIDSON & COMPANY LLP”

Vancouver, Canada Chartered Accountants

March 25, 2013

EMC Metals Corp.
(An Exploration Stage Company)
CONSOLIDATED BALANCE SHEETS
(Expressed in US Dollars)

As at:	December 31, 2012	December 31, 2011
ASSETS		
Current		
Cash	$ 190,215	$ 791,438
Investments in trading securities, at fair value (Note 3)	-	2,212
Prepaid expenses and receivables	109,335	188,946
Total Current Assets	299,550	982,596
Restricted cash (Note 4)	160,217	156,735
Property, plant and equipment (Note 5)	30,193,679	30,163,644
Mineral interests (Note 6)	753,182	668,349
Total Assets	$ 31,406,628	$ 31,971,324
LIABILITIES AND STOCKHOLDERS EQUITY		
Current		
Accounts payable and accrued liabilities	$ 656,499	$ 540,886
Convertible debenture (Note 10)	1,861,373	-
Current portion of promissory notes payable (Note 9)	4,680,688	500,000
Total Current Liabilities	7,198,560	1,040,886
Promissory notes payable (Note 9)	-	3,750,000
Total Liabilities	7,198,560	4,790,886
Stockholders Equity		
Capital stock (Note 11) (Authorized: Unlimited number of shares; Issued and outstanding: 165,358,337 (2011 150,678,713))	87,310,708	86,479,995
Treasury stock (Note 12)	(1,264,194)	(1,264,194)
Additional paid in capital (Note 11)	2,033,718	1,449,168
Accumulated other comprehensive loss	(2,844,668)	(3,422,332)
Deficit accumulated during the exploration stage	(61,027,496)	(56,062,199)
Total Stockholders Equity	24,208,068	27,180,438
Total Liabilities and Stockholders Equity	$ 31,406,628	$ 31,971,324

Nature and continuance of operations (Note 1)
Subsequent events (Note 16)

The accompanying notes are an integral part of these consolidated financial statements.

EMC Metals Corp.
(An Exploration Stage Company)
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Expressed in US Dollars)

	Cumulative amounts from incorporation on July 17, 2006 to December 31, 2012	Year ended December 31, 2012	Year ended December 31, 2011
EXPENSES			
Amortization (Note 5)	$ 2,337,369	$ 196,695	$ 331,568
Consulting	2,367,573	249,070	97,680
Exploration	14,735,227	1,088,384	2,102,918
General and administrative	7,351,422	521,314	641,080
Insurance	973,934	84,801	67,840
Professional fees	3,073,465	218,449	216,575
Research and development	3,042,091	-	-
Salaries and benefits	7,295,538	999,427	849,548
Stock-based compensation (Note 11)	5,340,376	331,800	296,127
Travel and entertainment	1,589,248	73,365	188,245
Loss before other items	(48,106,243)	(3,763,305)	(4,791,581)
OTHER ITEMS			
Foreign exchange gain (loss)	426,888	(19,274)	(58,165)
Gain (loss) on sale of marketable securities	181,238	-	-
Gain on settlement of convertible debentures	1,268,246	-	-
Gain on sale of marketable securities	1,720,016	(1,411)	-
Write-off of mineral interests	(15,965,169)	(4,910)	-
Write-off of land and water rights (Note 5)	(3,243,685)	(443,685)	(2,800,000)
Gain on insurance proceeds	912,534	-	-
Interest expense	(534,060)	(732,712)	(225,466)
Other income	466,463	-	-
Gain on disposition of assets (Note 6)	933,075	-	487,917
Change in fair value of derivative liability (Note 8)	453,790	-	231,262
Unrealized loss on marketable securities	(3,070,425)	-	-
	(16,451,089)	(1,201,992)	(2,364,452)
Loss before income taxes	(64,557,332)	(4,965,297)	(7,156,033)

Deferred income tax recovery	6,020,527	-	-
Loss for the period	(58,536,805)	(4,965,297)	(7,156,033)
Foreign currency translation adjustment	(2,844,668)	577,664	(984,896)
Comprehensive loss for the period	$ (61,381,473)	$ (4,387,633)	$ (8,140,929)
Basic and diluted loss per common share		$ (0.03)	$ (0.05)
Weighted average number of common shares outstanding		155,653,130	150,404,210

The accompanying notes are an integral part of these consolidated financial statements.

EMC Metals Corp.
(An Exploration Stage Company)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in US Dollars)

	Cumulative amounts from incorporation on July 17, 2006 to December 31, 2012	Year ended December 31, 2012	Year ended December 31, 2011
CASH FLOWS FROM OPERATING ACTIVITIES			
Loss for the period	$ (58,536,805)	$ (4,965,297)	$ (7,156,033)
Items not affecting cash:			
Amortization	2,337,369	196,695	331,568
Research and development	3,042,091	-	-
Consulting paid with common shares	9,379	-	-
Gain on disposal of assets	(933,075)	-	(487,917)
Convertible debenture costs	(1,149,630)	-	-
Unrealized foreign exchange	783,891	-	18,647
Stock-based compensation	5,340,376	331,800	296,127
Unrealized gain on marketable securities	(46,707)	-	-
Realized gain on marketable securities	(1,720,016)	1,411	-
Write-off of mineral properties	15,965,169	4,910	-
Write-off of land and water rights	3,243,685	443,685	2,800,000
Realized loss on transfer of marketable securities	2,935,895	-	-
Change in fair value of derivative liability	(453,790)	-	(231,262)
Deferred income tax recovery	(6,020,527)	-	-
Finance charge	296,539	296,539	-
	(34,906,156)	(3,690,257)	(4,428,870)
Changes in non-cash working capital items:			
Decrease (increase) in prepaids and receivables	(75,809)	83,416	(56,889)
Increase (decrease) in accounts payable and accrued liabilities	(240,769)	103,111	339,273
Increase in due to related parties	1,091,043	-	-
Asset retirement obligations	(999,176)	-	-
	(35,130,867)	(3,503,730)	(4,146,486)
CASH FLOWS FROM INVESTING ACTIVITIES			
Cash acquired from subsidiary	4,543,435	-	-
Cash paid for Subsidiary	(10,602,498)	-	-
Spin-out of Golden Predator Corp.	(66,890)	-	-
Restricted cash	(161,161)	-	(161,161)
Reclamation bonds	747,862	-	-
Proceeds from sale of marketable securities, net	(3,881,287)	2,251	-
Proceeds from sale of property, plant and equipment	633,294	-	16,000
Purchase of property, plant and equipment	(19,920,751)	(3,338)	(40,945)

Proceeds from sale of mineral interests	517,550	-	517,550
Additions to unproven mineral interests	(3,115,904)	(35,000)	(184,014)
	(31,306,350)	(36,087)	147,430
CASH FLOWS FROM FINANCING ACTIVITIES			
Common shares issued	52,484,603	790,508	211,391
Share issuance costs	(1,190,801)	-	-
Special warrants	12,095,274	-	-
Options exercised	370,812	-	43,769
Warrants exercised	10,534,109	-	325,360
Notes payable	(9,272,423)	-	-
Receipt of promissory note	1,000,000	1,000,000	-
Convertible debenture	2,000,000	2,000,000	-
Debt issuance costs	(249,827)	(249,827)	-
Payment of promissory note	(1,685,228)	(502,583)	-
Advances from related party	191,508	-	-
Loans advanced to Midway	(1,822,651)	-	-
Loan repayment from Midway	1,760,221	-	-
	66,215,597	3,038,098	580,520
Effect of foreign exchange on cash flows	411,835	(99,504)	61,146
Change in cash during the period	190,215	(601,223)	(3,357,390)
Cash, beginning of period	-	791,438	4,148,828
Cash, end of period	$ 190,215	$ 190,215	$ 791,438

Supplemental disclosure with respect to cash flows (Note 14)

The accompanying notes are an integral part of these consolidated financial statements.

EMC Metals Corp.
(An Exploration Stage Company)
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY
(Expressed in US Dollars)

	Capital Stock						
	Number of Shares	Amount $	Additional Paid in Capital $	Treasury Stock $	Accumulated Other Comprehensive Loss $	Deficit Accumulated During the Exploration Stage $	Tota $
Balance, July 17, 2006	-	-	-	-	-	-	
Private placements	5,000,000	3,017,350	-	-	-	-	3,017
Excess of exchange amount over carrying amount of Springer Mining Company	-	-	-	-	-	(2,490,691)	(2,490
Loss for the period	-	-	-	-	-	(316,382)	(316
Balance, December 31, 2006	5,000,000	3,017,350	-	-	-	(2,807,073)	210
Private placements	17,577,500	35,598,475	-	-	-	-	35,598
Conversion of special warrants	5,390,000	5,590,529	-	-	-	-	5,590
Exercise of warrants	50,000	74,235	-	-	-	-	74
Share issuance costs broker s fees	-	(1,202,721)	97,565	-	-	-	(1,105
Share issuance costs shares issued	100,000	99,910	-	-	-	-	99
Shares issued for mineral properties	100,000	95,822	-	-	-	-	95
Stock-based compensation	40,000	38,314	472,489	-	-	-	510
Loss for the year	-	-	-	-	-	(5,579,477)	(5,579
	28,257,500	43,311,914	570,054	-	-	(8,386,550)	35,495

Balance, December 31, 2007							
Private placements	5,322,500	10,543,442	-	-	-	-	10,543
Conversion of special warrants	7,610,000	7,484,629	-	-	-	-	7,484
Share issuance costs broker s fees	-	(263,169)	-	-	-	-	(263
Shares issued for mineral properties	110,000	206,229	-	-	-	-	206
Acquisition of Gold Standard Royalty Corp.	2,050,000	4,088,552	138,529	-	-	-	4,227
Acquisition of Great American Minerals Inc.	1,045,775	2,065,059	419,891	-	-	-	2,484
Acquisition of Fury Explorations Ltd.	10,595,814	12,963,070	7,343,879	(1,964,364)	-	-	18,342
Exercise of stock options	6,637,224	9,690,543	(178,482)	-	-	-	9,512
Shares issued for repayment of promissory note	4,728,000	2,017,257	-	-	-	-	2,017
Stock-based compensation	-	-	2,251,500	-	-	-	2,251
Loss for the year	-	-	-	-	-	(16,979,874)	(16,979
Balance, December 31, 2008	66,356,813	92,107,527	10,545,371	(1,964,364)	-	(25,366,423)	75,322
Private placements	14,500,000	1,123,489	-	-	-	-	1,123
Exercise of stock options	101,000	110,689	(92,970)	-	-	-	17
Shares issued for mineral properties	2,765,643	311,606	-	-	-	-	311
Settlement of convertible debentures	7,336,874	2,299,061	49,278	-	-	-	2,348
Shares issued for consulting	89,254	9,168	-	-	-	-	9

Shares issued for acquisition of TTS	19,037,386	1,976,697	-	-	-	-	1,976
Stock-based compensation before spin-out	-	-	799,008	-	-	-	799
Spin-out of GPD	-	(18,044,538)	(11,300,687)	-	-	-	(29,345
Stock-based compensation after spin-out	-	-	935,595	-	-	-	935
Foreign currency translation adjustment	-	-	-	-	(2,536,527)	-	(2,536
Loss for the year	-	-	-	-	-	(18,954,099)	(18,954
Balance, December 31, 2009	110,186,970	79,893,700	935,595	(1,964,364)	(2,536,527)	(44,320,522)	32,008
Private placements	30,252,442	4,563,680	441,565	-	-	-	5,005
Exercise of stock options	1,320,000	443,329	(219,732)	-	-	-	223
Exercise of warrants	7,300,000	1,060,257	-	-	-	-	1,060
Stock-based compensation	-	-	772,179	-	-	-	772
Foreign currency translation adjustment	-	-	-	-	99,091	-	99
Loss for the year	-	-	-	-	-	(4,585,644)	(4,585
Balance, December 31, 2010	149,059,412	85,960,966	1,930,007	(1,964,364)	(2,437,436)	(48,906,166)	34,583
Exercise of stock options	250,000	140,466	(76,796)	-	-	-	63
Exercise/expiry of warrants	1,369,301	378,563	(700,170)	700,170	-	-	378
Stock-based compensation	-	-	296,127	-	-	-	296
Foreign currency translation adjustment	-	-	-	-	(984,896)	-	(984
Loss for the year	-	-	-	-	-	(7,156,033)	(7,156
Balance, December 31,	150,678,713	86,479,995	1,449,168	(1,264,194)	(3,422,332)	(56,062,199)	27,180

2011							
Private placements	13,679,624	790,508	-	-	-	-	790
Stock-based compensation	-	-	331,794	-	-	-	331
Shares issued for mineral properties	1,000,000	40,205	-	-	-	-	40
Issue of convertible debenture warrants	-	-	252,756	-	-	-	252
Foreign currency translation adjustment	-	-	-	-	577,664	-	577
Loss for the year	-	-	-	-	-	(4,965,297)	(4,965
Balance, December 31, 2012	165,358,337	87,310,708	2,033,718	(1,264,194)	(2,844,668)	(61,027,496)	24,208

The accompanying notes are an integral part of these consolidated financial statements.

EMC Metals Corp.
(An Exploration Stage Company)
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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1. NATURE AND CONTINUANCE OF OPERATIONS

EMC Metals Corp. (the Company) is incorporated under the laws of the Province of British Columbia. The Company is focused on specialty metals exploration and production and has recently acquired various metallurgical technologies and licenses that it is utilizing to gain access to a number of specialty metals opportunities.

The Company s principal properties are located in the United States, Australia, and Norway. The Company s principal asset, the Springer Tungsten mine and mill, is currently not operating, and the Company is now working to restart mine operations with a partner or sell the assets outright. To December 31, 2012, the Company has not commenced production and has generated no revenue. The Company s remaining properties are in the exploration stage. As such, the Company is an exploration stage company and anticipates incurring significant additional expenditures prior to production at any and all of its properties.

These consolidated financial statements have been prepared on a going concern basis that contemplates the realization of assets and discharge of liabilities at their carrying values in the normal course of business for the foreseeable future. These financial statements do not reflect any adjustments that may be necessary if the Company is unable to continue as a going concern.

The Company currently earns no operating revenues and will require additional capital in order to restart its Springer tungsten mill and advance the Nyngan property. The Company s ability to continue as a going concern is uncertain and is dependent upon the generation of profits from mineral properties, obtaining additional financing and maintaining continued support from its shareholders and creditors. These are material uncertainties that raise substantial doubt about the Company s ability to continue as a going concern. The Company is currently working on securing additional financing to meet its needs and/or restructuring certain obligations; however there is no guarantee that these efforts will be successful. In the event that additional financial support is not received or operating profits are not generated, the carrying values of the Company s assets may be adversely affected.

2. SIGNIFICANT ACCOUNTING POLICIES

a) Basis of presentation

These consolidated financial statements have been prepared in conformity with generally accepted accounting principles of the United States of America (US GAAP).

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated on consolidation.

b) Change in presentation currency

Effective December 31, 2012, the Company changed its presentation currency from the Canadian dollar to the US dollar. The Company s consolidated financial statements for the year ended December 31, 2012 are the Company s first financial statements that will be presented in U.S. dollars. As a result of changing the presentation currency, all the comparative assets and liabilities were translated using the closing rate at the balance sheet date, comparative equity were translated at the exchange rates at the dates of transaction and the statements of loss were translated at the

average exchange rate for the period covered. All resulting change differences are recognized in the accumulated other comprehensive loss in the balance sheets equity section.

A change in presentation currency is accounted for as a change in accounting policy and is applied retrospectively, as if the new presentation currency had always been the presentation currency. Consequently, the comparatives for the year ended December 31, 2011 and as at December 31, 2011 have been restated to be presented in United States dollars. The exchange rates applied for translation purposes were as follows:

Date or period	Exchange rate
As at December 31, 2011	1 USD = 0.99490 CAD
For the year ended December 31, 2011	1 USD = 0.99958 CAD

c) Use of estimates

The preparation of consolidated financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. The Company regularly evaluates estimates and assumptions related to deferred income tax asset valuations, asset impairment, stock-based compensation and loss contingencies. The Company bases its estimates and assumptions on current facts, historical experience and various other factors that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the other sources. The actual results experienced by the Company may differ materially and adversely from the Company s estimates. To the extent there are material differences between estimates and the actual results, future results of operations will be affected.

d) Investment in trading securities

The Company s trading securities are reported at fair value, with unrealized gains and losses included in earnings.

EMC Metals Corp.
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2. SIGNIFICANT ACCOUNTING POLICIES (cont d)

e) Property, plant and equipment

Property, plant and equipment are recorded at cost less accumulated amortization, calculated as follows:

Plant and equipment	5% straight line
Building	5% straight line
Computer equipment	30% straight line
Small tools and equipment	20% straight line
Office equipment	20% straight line
Automobile	30% straight line
Leasehold improvements	Over life of the lease

f) Mineral properties and exploration and development costs

The costs of acquiring mineral rights are capitalized at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. If, after review, management concludes that the carrying amount of a mineral property is impaired, it will be written down to estimated fair value. Exploration costs incurred on mineral properties are expensed as incurred. Development costs incurred on proven and probable reserves will be capitalized. Upon commencement of production, capitalized costs will be amortized using the unit-of-production method over the estimated life of the ore body based on proven and probable reserves (which exclude non-recoverable reserves and anticipated processing losses).

g) Asset retirement obligations

The Company records the fair value of an asset retirement obligation as a liability in the period in which it incurs a legal obligation associated with the retirement of tangible long-lived assets that result from the acquisition, construction, development, and/or normal use of the long-lived assets. The Company also records a corresponding asset which is amortized over the life of the asset. Subsequent to the initial measurement of the asset retirement obligation, the obligation is adjusted at the end of each period to reflect the passage of time (accretion expense) and changes in the estimated future cash flows underlying the obligation (asset retirement cost).

h) Long-lived assets

Long-lived assets held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. For purposes of evaluating the recoverability of long-lived assets, the recoverability test is performed using undiscounted net cash flows related to the long-lived assets. If such assets are considered to be impaired, the impairment recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

i) Income taxes

The Company accounts for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the asset and liability method the effect on deferred tax assets and liabilities

of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recognized if it is more likely than not that some part or all of the deferred tax asset will not be recognized.

j) Loss per share

Basic loss per common share is computed using the weighted average number of common shares outstanding during the year. To calculate diluted loss per share, the Company uses the treasury stock method and the if converted method. As of December 31, 2012, there were 3,750,000 warrants (2011 Nil) and 13,576,250 options (2011 11,848,750) outstanding which have not been included in the weighted average number of common shares outstanding as these were anti-dilutive.

k) Foreign exchange

The Company's functional currency is the Canadian dollar. Any monetary assets and liabilities that are in a currency other than the Canadian dollar are translated at the rate prevailing at year end. Revenue and expenses in a foreign currency are translated at rates that approximate those in effect at the time of translation. Gains and losses from translation of foreign currency transactions into Canadian dollars are included in current results of operations.

EMC Metals Corp.
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2. SIGNIFICANT ACCOUNTING POLICIES (cont d)

l) Stock-based compensation

The Company accounts for stock-based compensation under the provisions of Accounting Standard Codification (ASC) 718, Compensation-Stock Compensation . Under the fair value recognition provisions, stock-based compensation expense is measured at the grant date for all stock-based awards to employees and directors and is recognized as an expense over the requisite service period, which is generally the vesting period. The Black-Scholes option valuation model is used to calculate fair value.

m) Financial instruments

The Company s financial instruments consist of cash, investments in trading securities, receivables, accounts payable, accrued liabilities, convertible debentures and promissory notes payable. It is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from its financial instruments. The fair values of these financial instruments approximate their carrying values unless otherwise noted. The Company has its cash primarily in one commercial bank in Vancouver, British Columbia, Canada.

n) Concentration of credit risk

The financial instrument which potentially subjects the Company to concentration of credit risk is cash. The Company maintains cash in bank accounts that, at times, may exceed federally insured limits. As of December 31, 2012 and 2011, the Company has exceeded the federally insured limit. The Company has not experienced any losses in such amounts and believes it is not exposed to any significant risks on its cash in bank accounts.

o) Comparative figures

Certain comparative figures have been reclassified to conform with the current year s presentation.

p) Fair value of financial assets and liabilities

The Company measures the fair value of financial assets and liabilities based on US GAAP guidance which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.

The Company classifies financial assets and liabilities as held-for-trading, available-for-sale, held-to-maturity, loans and receivables or other financial liabilities depending on their nature. Financial assets and financial liabilities are recognized at fair value on their initial recognition, except for those arising from certain related party transactions which are accounted for at the transferor s carrying amount or exchange amount.

Financial assets and liabilities classified as held-for-trading are measured at fair value, with gains and losses recognized in net income. Financial assets classified as held-to-maturity, loans and receivables, and financial liabilities other than those classified as held-for-trading are measured at amortized cost, using the effective interest method of amortization. Financial assets classified as available-for-sale are measured at fair value, with unrealized gains and losses being recognized as other comprehensive income until realized, or if an unrealized loss is considered other than temporary, the unrealized loss is recorded in income.

Financial instruments, including receivables, accounts payable and accrued liabilities, convertible debentures and promissory notes payable are carried at amortized cost, which management believes approximates fair value due to the short term nature of these instruments. Investments in trading securities are classified as held for trading, with

unrealized gains and losses being recognized in income.

The following table presents information about the assets that are measured at fair value on a recurring basis as of December 31, 2012, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Fair values determined by Level 3 inputs are unobservable data points for the asset or liability, and included situations where there is little, if any, market activity for the asset:

	December 31, 2012	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash and restricted cash	$ 350,432	$ 350,432	$	$
Total	$ 350,432	$ 350,432	$	$

The fair values of cash, restricted cash and investments in trading securities are determined through market, observable and corroborated sources.

EMC Metals Corp.
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2. SIGNIFICANT ACCOUNTING POLICIES (cont d)

q) Recently Adopted and Recently Issued Accounting Standards

The Company reviewed significant newly issued accounting pronouncements and concluded that they are either not applicable to the Company s business or that no material effect is expected on the consolidated financial statements as a result of future adoption.

3. INVESTMENTS IN TRADING SECURITIES

At December 31, 2012, the Company did not hold investments classified as trading securities (December 31, 2011 $2,212).

4. RESTRICTED CASH

The Company has a Bank of Montreal line of credit of up to C$159,400 as a deposit on the Company s Vancouver office lease and is secured by a short-term investment of C$159,400 bearing interest at prime less 2.05% maturing on May 8, 2014, contemporaneous with the date the office lease expires.

5. PROPERTY, PLANT AND EQUIPMENT

2012

	December 31, 2011 Net Book Value	Additions (disposals) (write-offs)	Amortization	Currency Translation Adjustment	December 31, 2012 Net Book Value
Land and water rights	$ 4,595,829	$ (443,499)	$ -	$ 99,816	$ 4,252,146
Plant and equipment	25,190,293	-	-	559,559	25,749,852
Cosgrave plant and equipment	71,244	-	(72,484)	1,240	-
Buildings	173,301	-	(11,139)	3,797	165,959
Automobiles	19,995	-	(9,138)	405	11,262
Computer equipment	795	3,338	(800)	69	3,402
Small tools and equipment	98,283	-	(99,994)	1,711	-
Office Equipment	13,904	-	(3,140)	294	11,058
	$ 30,163,644	$ (440,161)	$ (196,695)	$ 666,891	$ 30,193,679

2011

	December 31, 2010 Net Book Value	Additions (disposals) (write-offs)	Amortization	Currency Translation Adjustment	December 31, 2011 Net Book Value
Land and water rights	$ 8,015,575	$ (2,800,000)	$ -	$ (619,746)	$ 4,595,829
Plant and equipment	25,757,619	-	-	(567,326)	25,190,293
	148,410	-	(75,981)	(1,185)	71,244

Cosgrave plant and equipment					
Buildings	188,398	-	(11,279)	(3,818)	173,301
Automobiles	-	24,754	(4,362)	(397)	19,995
Computer equipment	6,749	-	(5,970)	16	795
Small tools and equipment	284,592	-	(185,087)	(1,222)	98,283
Office Equipment	74,701	(12,277)	(48,889)	369	13,904
	$ 34,476,044	$ (2,787,523)	$ (331,568)	$ (1,193,309)	$ 30,163,644

Land and water rights are in respect of properties in Nevada. The plant and equipment is comprised of the Springer Plant and Mill in Nevada which is currently under care and maintenance.

Impairment of land and water rights

During the year ended December 31, 2012, the Company reviewed the carrying value of its land and water rights for impairment and compared the carrying value to the estimated recoverable amount and wrote down its land and water rights by $443,685. During the year ended December 31, 2011, the Company made a similar review and wrote down its land and water rights by $2,800,000.

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6. MINERAL INTERESTS

December 31, 2012	Other	Tungsten	Total
Acquisition costs			
Balance, December 31, 2011	$ 474,199	$ 194,150	$ 668,349
Additions	75,205	-	75,205
Write-off	(4,910)	-	(4,910)
Translation adjustment	10,225	4,313	14,538
Balance, December 31, 2012	$ 554,719	$ 198,463	$ 753,182

December 31, 2011	Other	Tungsten	Total
Acquisition costs			
Balance, December 31, 2010	$ 301,711	$ 204,040	$ 505,751
Additions	177,720	2,471	180,191
Sold	-	(8,145)	(8,145)
Translation adjustment	(5,232)	(4,216)	(9,448)
Balance, December 31, 2011	$ 474,199	$ 194,150	$ 668,349

Title to mineral property interests involves certain inherent risks due to the difficulties of determining the validity of certain claims as well as the potential for problems arising from the frequently ambiguous conveyancing history characteristic of many mineral property interests. The Company has investigated title to all of its mineral property interests and, to the best of its knowledge, title to all of its properties is in good standing.

TUNGSTEN PROPERTY

Springer Property

On November 21, 2006, the Company acquired all outstanding and issued shares of Springer Mining Company (Springer). Included in the assets of Springer and allocated to property, plant and equipment (Note 5) are the Springer Mine and Mill located in Pershing County, Nevada.

Fostung Property

The Company held a 100% interest in certain mineral claims known as the Fostung Property, Ontario. During the year ended December 31, 2011, the Company sold these claims for C$500,000 and recorded a gain on the sale of $487,917.

SCANDIUM PROPERTIES

Nyngan, New South Wales Property

On February 5, 2010, the Company entered in to an earn-in agreement with Jervois Mining Limited (Jervois), whereby it would acquire a 50% interest in the Nyngan Scandium property located in New South Wales, Australia. In order for the Company to earn its 50% interest, which is subject to a 2% Net Smelter Royalty (NSR), the Company paid an initial cash sum of C$300,000 to Jervois, and was additionally required to meet two additional work steps:

a) Incur exploration and metallurgical work expenditures of A$500,000 (US$431,000) within 180 business days of the conditions precedent being satisfied, or pay cash in lieu thereof. The Company received a six month extension to complete its exploration spending commitment, which it met in advance of the extended deadline in the period ended June 30, 2011.

b) Deliver a feasibility study on the Nyngan Scandium Project to Jervois, and pay Jervois an additional cash payment of A$1,300,000 plus GST, by a deadline of February 28, 2012.

On February 6, 2013, the Company announced that it had agreed to an out of court settlement to its dispute with Jervois in relation to the Nyngan Scandium project in NSW, Australia. The terms of the settlement transfer 100% ownership and control of the Nyngan Scandium project to the Company, in return for cash payments of A$2,600,000 before June 30, 2014 and a percentage royalty payable to Jervois on sales of product from the project.

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6. MINERAL INTERESTS (cont d)

Tørdal and Evje-Iveland properties, Norway

During fiscal 2012 the Company entered into an option agreement with REE Mining AS (REE) to earn up to a 100% interest in the Tørdal and Evje-Iveland properties pursuant to which the Company paid $130,000 and issued 1,000,000 common shares valued at $40,000. To earn its interest, the original agreement required the Company to pay REE an additional $500,000, incur $250,000 of exploration work and issue 250,000 common shares upon releasing the second of two full feasibility studies on the two properties. The Company subsequently renegotiated the payments required to earn the interest and the Evje-Iveland property was removed from the option agreement. Pursuant to the amendment, the Company earned a100% interest in the Tørdal property by paying an additional $35,000 and granting a 1% Net Smelter Return (NSR) payable to REE.

Fairfield property, Utah

In 2011 the Company entered into an earn-in agreement with Mineral Exploration Services LLC, whereby the Company had an option to earn a 100% interest in a patented mining claim and former scandium property known as The Little Green Monster near Fairfield, Utah.

The Company decided to write-off its investment of $4,910 in this project in fiscal 2012.

Hogtuva property, Norway

During fiscal 2011 the Company entered into an option agreement with REE Mining AS (REE) to earn a 100% interest in three scandium and beryllium exploration sites in Norway pursuant to which the Company paid $50,000. To earn its interest, the original agreement required the Company to pay REE an additional $100,000 and issue up to 200,000 common shares. Subsequent to December 31, 2012 the Company renegotiated the payments required to earn the interest and removed two of the exploration sites from the agreement. Pursuant to the amendment, the Company earned a 100% interest in the Hogtuva property in consideration for the $50,000 original payment and the grant of a 1% NSR payable to REE.

7. RELATED PARTY TRANSACTIONS

A promissory note due to a director of the Company (principal balance of $500,000) matured and was paid during June 2012. The promissory note was issued as part of the purchase of a subsidiary company during November 2009.

During the year ended December 31, 2012, the Company expensed a consulting fee of $68,000 for one of its directors. Of this total $34,000 remains unpaid at year-end. There were no such fees paid in 2011.

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9. PROMISSORY NOTES PAYABLE

	December 31, 2012	December 31, 2011
Promissory note with a principal balance of $500,000, bearing interest at prime per annum, maturing June 30, 2012 due to a director of the Company secured by the stock of a subsidiary company.	$ -	$ 500,000
Promissory note with a principal balance of $3,750,000, bearing interest at 6% per annum, maturing July 3, 2013 and secured by land and water rights.		
During fiscal 2008 the Company entered into a promissory note for $6,750,000 as consideration for the acquisition of land and water rights. The Company subsequently made principal payments of $3,000,000 consisting of a cash payment of $1,000,000 and 4,728,000 units of the Company equity valued at $2,000,000. Each unit consisted of one common share and one-half share purchase warrant exercisable at C$0.75 each and exercisable for a period of two years. The note is secured by a First Deed of Trust on the Cosgrave property land and water rights.	3,750,000	3,750,000
During the year ended December 31, 2012 the Company completed a $3,000,000 loan financing (Note 10) which included a $1,000,000 note payable bearing interest at 7% per annum maturing August 15, 2013. Presented is this principal balance less financing and costs which are amortized over the term of the debt using the effective interest method. This resulted in a carrying amount of $831,841 upon deducting a debt discount of $168,159 from the principal balance of $1,000,000. During fiscal 2012, the Company recognized $98,847 in accretion through interest expense. The note payable is secured by an interest in the assets of the Company s subsidiary, Springer Mining Company.	930,688	-
	4,680,688	4,250,000
Less: current portion	(4,680,688)	(500,000)
	$ Nil	$ 3,750,000

10. CONVERTIBLE DEBENTURE

On February 17, 2012, the Company completed a $3,000,000 loan financing consisting of a term loan of $1,000,000 (Note 9), a convertible debenture of $2,000,000 and warrants to acquire 3,000,000 common shares. The convertible debenture has a maturity date of August 15, 2013 and bears interest at 7% per annum. The lender may convert a maximum of $2,000,000 of the principal amount of the loan into 10,000,000 common

shares of the Company. The loan is secured by an interest in the assets of the Company s subsidiary, Springer Mining Company. There was no beneficial conversion feature associated with the conversion option. The warrants are exercisable at C$0.20 per share expiring February 15, 2014. A relative fair value of $217,267 was assigned to the warrants and recorded in additional paid in capital. The Company paid financing costs of $249,827 and also issued 750,000 purchase warrants exercisable at C$0.20 per share expiring February 15, 2014. These warrants were valued at $58,716 with a volatility of 120%, expected life of 2 years, risk free rate of 1.0% and expected dividend yield of 0.0% and recorded in additional paid in capital. The financing costs were allocated between debt and the equity components. This resulted in a convertible debenture carrying amount of $1,663,681 at December 31, 2012 upon deducting a debt discount of $336,319 from the principal balance of $2,000,000. During fiscal 2012, the Company recognized $197,692 in accretion through interest expense.

11. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL

On December 20, 2012, the Company issued 1,000,000 common shares at a value of $40,205 for the Tørdal and Hogtuva projects in Norway.

On December 16, 2012, the Company issued 2,000,000 common shares at a value of C$0.05 per common share for total proceeds of C$100,000.

On July 24, 2012, the Company issued 11,679,624 common shares at a value of C$0.06 per common share for total proceeds of C$700,777.

On December 3, 2010, the Company issued 18,929,740 common shares at a value of C$0.19 per common share for total proceeds of C$3,596,651. A total of C$210,249 was received during fiscal 2011.

On November 25, 2010, the Company issued 6,100,000 units at a value of C$0.10 per unit for total proceeds of C$610,000. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at C$0.18 expiring on November 25,

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11. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL (cont d)

2011. The warrants have a calculated total fair value of C$142,358 using the Black-Scholes pricing model with a volatility of 142.52%, risk-free rate of 1.73%, expected life of 1 year, and a dividend rate of 0%.

On June 30, 2010, the Company issued 2,947,702 units at a value of C$0.10 per unit for total proceeds of C$294,770. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at C$0.18 until June 30, 2011. The warrants have a calculated total fair value of C$35,638 using the Black-Scholes pricing model with a volatility of 123.84%, risk-free rate of 1.39%, expected life of 1 year, and a dividend rate of 0%.

On February 17, 2010, the Company issued 2,275,000 units at a value of C$0.20 per unit for total proceeds of C$455,000. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at C$0.25 until February 17, 2011. The warrants have a calculated total fair value of C$78,113 using the Black-Scholes pricing model with a volatility of 131.19%, risk-free rate of 1.34%, expected life of 1 year, and a dividend rate of 0%. All of the warrants were exercised during fiscal 2011.

On November 17, 2009, the Company issued 13,000,000 units at a value of C$0.08 per unit for total proceeds of C$1,040,000. Each unit consisted of one common share and one-half of one share purchase warrant. Each full warrant entitled the holder to purchase an additional share at C$0.15 per share until November 17, 2010.

On October 13, 2009, the Company issued 500,000 common shares at a value of C$45,000 for the Fostung Tungsten project.

On August 27, 2009, the Company issued 1,500,000 units at a value of C$0.10 per unit, pursuant to a non-brokered private placement for proceeds of C$150,000. Each unit consisted of one common share and one-half of one share purchase warrant. Each full warrant entitled the holder to purchase an additional share at C$0.15 per share until August 27, 2010.

On May 13, 2009, the Company issued 89,254 common shares at a value of C$0.12 per share to a consultant for settlement of consulting fees for Fury Explorations Ltd. (Fury), a subsidiary of GPD, under the plan of Arrangement of spin-out. On April 21, 2009, the Company issued 51,859 common shares at a value of C$0.10 per share for the Platte River property.

On January 21, 2009, the Company issued 66,784 common shares at a value of C$0.20 per share for the Guijoso property for Fury.

On January 6, 2009, the Company issued 2,147,000 common shares at a value of $250,000 for the Adelaide and Tuscarora projects for Golden Predator Mines US Inc., a wholly owned subsidiary of the Company prior to the spin-out.

On November 17, 2008, the Company issued 76,274 common shares in connection with the acquisition of the subsidiary, Great American Minerals Inc.

On October 18, 2008, the Company issued 4,728,000 units to Cosgrave for repayment of a promissory note at a value of $2,000,000. Each unit consisted of one common share of the Company and one-half of one common share purchase

warrant with a two year life and exercisable at C$0.75.

In July 2008, the Company completed a private placement consisting of 2,500,000 common shares at C$2.00 per share for proceeds of C$5,000,000. In connection with this private placement the Company paid a finder s fee of $250,000.

In January 2008, the Company completed a private placement consisting of 2,822,500 units at C$2.00 per unit for gross proceeds of C$5,645,000. Included in the proceeds was C$3,620,000 received in advance as of December 31, 2007. Each unit consisted of one common share and one half of one share purchase warrant. Each whole warrant entitled the holder to acquire one additional common share at C$3.00 for a period of 12 months.

In November 2007, the Company completed private placements consisting of 17,577,500 units at C$2.00 per unit for proceeds of C$35,155,000. Each unit consisted of one common share and one half of one common share purchase warrant. Each whole warrant entitled the holder to acquire one additional common share at C$3.00 for a period of 12 months following the closing of the placement.

In December 2007, the Company issued 5,390,000 common shares pursuant to the conversion of special warrants. The Company paid C$1,016,074 and issued 100,000 common shares valued at C$100,000 as issuance costs and finder s fees. The Company also granted warrants to acquire 300,000 common shares exercisable at C$1.50 expiring September 22, 2008. The warrants were valued at C$99,000 with the Black-Scholes option pricing model using an expected volatility of 115%, life of one year, a risk free interest rate of 4% and a dividend yield of 0%.

In December 2006, the Company issued 5,000,000 common shares at C$0.70 per common share for gross proceeds of C$3,500,000.

Stock Options and Warrants

The Company established a stock option plan (the Plan) under which it is authorized to grant options to executive officers and directors, employees and consultants and the number of options granted under the Plan shall not exceed 15% of the shares outstanding. Under the Plan, the exercise period of the options may not exceed five years from the date of grant and vesting is determined by the Board of Directors.

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11. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL (cont d)

Stock option and share purchase warrant transactions are summarized as follows:

	Warrants		Stock Options	
	Number	Weighted average exercise price in Canadian $	Number	Weighted average exercise price in Canadian $
Outstanding, December 31, 2010	23,792,485	$ 1.82	11,473,750	$ 0.18
Granted	-	-	1,470,000	0.28
Cancelled	(22,423,184)	1.97	(845,000)	0.22
Exercised	(1,369,301)	0.24	(250,000)	0.17
Outstanding, December 31, 2011	-	-	11,848,750	0.19
Granted	3,750,000	0.20	3,885,000	0.08
Cancelled	-	-	(2,187,500)	0.28
Exercised	-	-	-	-
Outstanding, December 31, 2012	3,750,000	$ 0.20	13,546,250	$ 0.14
Number currently exercisable	3,750,000	$ 0.20	12,835,250	$ 0.14

As at December 31, 2012, incentive stock options were outstanding as follows:

	Number of options	Exercise Price in Canadian $	Expiry Date
Options	90,000	$ 0.390	January 18, 2013 *
	152,500	0.200	February 25, 2013 *
	65,000	2.000	February 25, 2013 *
	25,000	0.200	March 4, 2013 *
	120,000	0.310	April 27, 2013
	55,000	0.200	May 13, 2013

645,000	0.200	October 31, 2013
537,500	0.300	January 23, 2014
50,000	0.300	February 26, 2014
1,020,000	0.160	June 16, 2014
225,000	0.120	August 27, 2014
200,000	0.105	December 16, 2014
626,250	0.250	January 4, 2015
4,800,000	0.100	November 5, 2015
250,000	0.315	May 4, 2016
500,000	0.250	May 16, 2016
300,000	0.155	September 15, 2016
2,335,000	0.080	April 24, 2017
1,550,000	0.070	August 8, 2017
13,546,250		

* These options expired in the first quarter of 2013.

As at December 31, 2012, warrants were outstanding as follows:

Warrants	Number of Warrants	Exercise Price in Canadian $	Expiry Date
	3,750,000	$ 0.20	February 15, 2014

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11. **CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL** (cont d)

Stock-based compensation

During the year ended December 31, 2012, the Company recognized stock-based compensation of $331,800 (December 31, 2011 - $296,127) in the statement of operations as a result of incentive stock options granted and vested in the current period. There were 3,885,000 stock options issued during the year ended December 31, 2012 (December 31, 2011 1,470,000).

The weighted average fair value of the options granted in the period was C$0.08 (2011 - C$0.31).

The fair value of all compensatory options and warrants granted is estimated on grant date using the Black-Scholes option pricing model. The weighted average assumptions used in calculating the fair values are as follows:

	2012	2011
Risk-free interest rate	1.56%	2.44%
Expected life	5 years	4.36 years
Volatility	137.03%	127.51%
Forfeiture rate	0.00%	0.00%
Dividend rate	0.00%	0.00%

12. TREASURY STOCK

	Number		Amount
Treasury shares, December 31, 2012 and 2011	1,033,333	$	1,264,194
	1,033,333	$	1,264,194

Treasury shares comprise shares of the Company which cannot be sold without the prior approval of the TSX.

13. SEGMENTED INFORMATION

The Company s mineral properties are located in Norway, Australia, and the United States and its capital assets geographic information is as follows:

December 31,2012	Norway	Australia	United States	Total
Property, plant and equipment	$ -	$ -	$ 30,193,679	$ 30,193,679
Mineral interests	253,181	301,538	198,463	753,182
	$ 253,181	$ 301,538	$ 30,392,142	$ 30,946,861

December 31,2011	Norway	Australia	United States	Total

Property, plant and equipment	$ -	$ -	$ 30,163,644	$ 30,163,644
Mineral interests	179,214	294,985	194,150	668,349
	$ 179,214	$ 294,985	$ 30,357,794	$ 30,831,993

14. SUPPLEMENTAL DISCLOSURE WITH RESPECT TO CASH FLOWS

	2012	2011
Cash paid during the year for interest	$ 310,957	$ 129,422
Cash paid during the year for income taxes	$ -	$ -

Significant non-cash transactions for the year ended December 31, 2012 include the Company granting 750,000 share purchase warrants at a value of $58,510 as finder s fees pursuant to the promissory note and convertible debenture financings (Note 10). The Company also issued 1,000,000 common shares at a value of $40,205 in acquisition of mineral interests.

There were no significant non cash transactions for the year ended December 31, 2011.

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15. DEFERRED INCOME TAXES

A reconciliation of income taxes at statutory rates with the reported taxes is as follows:

	2012	2011
Loss before income taxes	$ (4,965,297)	$ (7,356,033)
Expected income tax recovery	(1,241,000)	(1,949,000)
Change in statutory, foreign tax, foreign exchange rates and other	(1,120,000)	2,708,000
Permanent difference	78,000	(46,000)
Share issue and financing costs	(5,000)	-
Change in unrecognized deductible temporary differences	2,288,000	(713,000)
Total Income tax recovery	$ -	$ -

The Canadian income tax rate declined during the year due to changes in the law that reduced corporate income tax rates in Canada.

The significant components of the Company s deferred tax assets and liabilities are as follows:

	2012	2011
Deferred Tax Assets (Liabilities)		
Debt with accretion	$ (52,000)	$ -
Non-capital losses		
	52,000	-
Net deferred tax liability	$ -	$ -

The significant components of the Company s deferred tax assets that have not been set up are as follows;

	2012	2011
Deferred Tax Assets (Liabilities)		
Exploration and evaluation assets	$ 3,161,000	$ 1,356,000
Property and equipment	149,000	140,000
Share issue costs	50,000	14,000
Marketable securities	18,000	-
Allowable capital losses	1,381,000	1,381,000
Non-capital losses available for future periods	5,067,000	4,647,000
	9,826,000	7,538,000
Unrecognized deferred tax assets	(9,826,000)	(7,538,000)
Net deferred tax assets	$ -	$ -

The significant components of the Company s temporary differences, unused tax credits and unused tax losses that have not been included on the consolidated statement of financial position are as follows:

	2012	Expiry Date Range	2011	Expiry Date Range
Temporary Differences				
Exploration and evaluation assets	$ 10,138,000	No expiry date	$ 4,349,000	No expiry date
Property and equipment	525,000	No expiry date	493,000	No expiry date
Share issue costs	201,000	2033 to 2036	56,000	2032 to 2035
Marketable securities	145,000	No expiry date	3,000	No expiry date
Allowable capital losses	5,523,000	No expiry date	5,523,000	No expiry date
Non-capital losses available for future periods	17,696,000	2016 to 2032	16,105,000	2016 to 2031

16. SUBSEQUENT EVENTS

On February 4, 2013, the Company issued convertible loans for total proceeds of $650,000. The convertible loans have a maturity date of 12 months from the closing date and bear interest at the rate of 10% per annum. The principal amount of the loan may be converted into up to 13,000,000 common shares at a rate of $0.05 per share. The convertible loan will be secured by an interest in the assets of the Company's subsidiary, Wolfram Jack Mining Company (primarily the Carlin Vanadium mineral rights), the Norway exploration rights and a subordinated interest in Springer Mining Company assets. A total of $600,000 of the offering is being subscribed for by insiders of the Company.

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16. SUBSEQUENT EVENTS (cont d)

On February 6, 2013, the Company announced that it had agreed to an out of court settlement to its dispute with Jervois Mining Limited ("Jervois") in relation to the Nyngan Scandium project in NSW, Australia. The terms of the settlement transfer 100% ownership and control of the Nyngan Scandium project to EMC, in return for cash payments and a percentage royalty payable to Jervois on sales of product from the project.

On March 18, 2013, the Company granted options to purchase 600,000 shares of the Company at $0.05 per share expiring March 18, 2018 subject to certain vesting provisions.